DOCUMENT RESUME

ED 167 799 CE 020 263

AUTHOR Whaples, Gene C.; Ewert, D. Merrill
TITLE Proceedings: Lifelong Learning Research Conference (University of Maryland, January 10-11, 1979).
INSTITUTION Maryland Univ., College Park. Conferences and Institutes Div.; Maryland Univ., College Park. Cooperative Extension Service.
SPONS AGENCY Department of Agriculture, Washington, D.C.
PUB DATE 79
NOTE 105p.; Some pages will not reproduce well due to light or broken print

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS *Adult Education; Community Development; *Continuous Learning; Environmental Education; International Education; *Nonformal Education; *Program Descriptions; Research Methodology; *Research Projects; Symposia; Volunteer Training
IDENTIFIERS Maryland

ABSTRACT

The proceedings of the 1979 Lifelong Learning Research Conference held at the University of Maryland are reported in this document. Focusing upon non-formal adult education, the papers presented deal with environmental/leisure education issues, adult/continuing education concerns, community development, international education, volunteerism, and research methodology. The conference program is provided, along with a list of steering committee members and sponsors. Abstracts of papers presented at the conference are included, with authors' addresses for further information. Symposium topics and summaries then follow with attached references. The keynote address, "The Need for Bridging the Gap from Research to Practice in Lifelong Learning," by Donnie Dutton, is presented in full. Finally, a list of participants and their addresses is appended. (CT)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED167799

PROCEEDINGS

LIFELONG LEARNING RESEARCH CONFERENCE
1979

Gene C. Whaples
D. Merrill Ewert

BEST COPY AVAILABLE

PROCEEDINGS OF A CONFERENCE

Conducted By

Maryland Cooperative Extension Service
at the University of Maryland
College Park, Maryland
January 10 and 11, 1979

In Cooperation With

Department of Agricultural and Extension Education-University of Maryland
Conferences and Institutes Division-University of Maryland-University College
Adult Education Association/USA
Maryland Association of Adult Education
Metropolitan Washington Adult Education Association
Maryland Service Corps

CE 020 263

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Gene C. Whaples
D. Merrill Ewert

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914 in cooperation with the U.S. Department of Agriculture, University of Maryland and local governments. John M Curtis, Director of Cooperative Extension Service, University of Maryland.

The University of Maryland is an equal opportunity institution with respect to both education and employment. The university's policies, programs and activities are in conformance with pertinent federal and state laws and regulations on nondiscrimination regarding race, color, religion, age, national origin, sex and handicap. Inquiries regarding compliance with Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Educational Amendments; Section 504 of the Rehabilitation Act of 1973; or related legal requirements should be directed to the Human Relations Coordinator, Maryland Cooperative Extension Service, University of Maryland, Room 1214, Symons Hall, College Park, Maryland 20742.

PREFACE

This publication is a report of the proceedings of the 1979 Lifelong Learning Research Conference held at the University of Maryland in College Park, Maryland, on January 10 - 11, 1979. The conference focus on non-formal adult education grew out of a concern with problems in this region and the need to facilitate dialogue between researchers and practitioners involved in their resolution. Papers dealt with environmental/leisure education issues, adult/continuing education concerns, community development, international education, volunteerism, and research methodology.

The conference was unique in several important ways. First, although papers were received from many places, the conference generally had a regional emphasis. A majority of the papers came from the eastern United States.

Secondly, it was built on inter-agency linkages in the region. Sponsoring agencies included the Maryland Cooperative Extension Service, the University of Maryland's Department of Agricultural and Extension Education, the Conferences and Institutes Division of University College (University of Maryland), the Adult Education Association--USA, the Maryland Association of Adult Education, the Metropolitan Washington Adult Education Association, and the Maryland Service Corps. The steering committee included representatives from The American University, Morgan State University, Bowie State College, The Johns Hopkins University, Temple University, the University of Delaware, the University of the District of Columbia, as well as the University of Maryland.

Thirdly, a major goal of the conference was to bridge the gap between theory and practice by providing a mechanism through which researchers and practitioners could share their concerns with each other. This theme was also reflected in AEA President Donnie Dutton's plenary address entitled, "The Need for Bridging the Gap from Research to Practice in Lifelong Learning".

Finally, the conference had an inter-disciplinary focus, bringing together people with different academic backgrounds who share similar concerns with lifelong learning issues. Participants included social scientists, extension agents, program administrators, students and professors of adult education, as well as practitioners working in environmental learning centers, community development programs, religious institutions, and other nonformal adult education programs. The papers ranged from philosophy and anthropology to presentations of research findings and discussions of research methodology.

The conference was refereed by a peer committee that reviewed over 75 abstracts submitted from 20 states and Canada. The committee selected the 37 papers that were then presented.

The authors' names and addresses are listed at the bottom of the first page of each abstract. If you desire more information, please correspond directly with them.

We would like to thank all of those persons--too numerous to mention--who contributed to the success of the conference. We could not have done it without you. We hope that our efforts will be a small contribution to the continuing dialogue on nonformal education issues.

LIFELONG LEARNING RESEARCH CONFERENCE

January 10-11, 1979

Opening Session Program

9:30 a.m. Presiding - Dr. Clifford L. Nelson, Chairman
Department of Agricultural and Extension Education
University of Maryland
College Park

Greetings and Introduction of Chancellors -

Dr. John M. Curtis, Director
Maryland Cooperative Extension Service
University of Maryland
College Park - Eastern Shore

Welcomes - Dr. Robert L. Gluckstern
Chancellor
University of Maryland
College Park

Dr. T. Benjamin Massey
Chancellor
University of Maryland
University College

9:45 a.m. Keynote Remarks - "The Need for Bridging the Gap from Research to Practice in Lifelong Learning"

Dr. Donnie Dutton
University of Arkansas
President of the Adult Education Association/USA

LIFELONG LEARNING RESEARCH CONFERENCE
January 10-11, 1979
Fire Fighters Room - Center for Continuing Education
University of Maryland, College Park

JANUARY 10

9:00 AM Registration

9:30 AM Opening Session - Key Note by Dr. Donnie Dutton, President of Adult Education Assoc./USA

Paper Sessions

	Section A	Section B	Section C
	Coordinator: Thelma Cornish Coordinator of Adult Continuing Education, Md. State Department of Education	Coordinator: Dr. Jeanne Lea Prof. of Adult Education, Univ. of the District of Columbia	Coordinator: Dr. Robert C. Hardy, Assoc. Prof., Institute for Child Study, University of Maryland
10:15-10:55	*Choice of Learning Format as a Function of Three Constructs: Personality Variables, Cognitive Style, & Locus of Control*-Elizabeth A. Bertinot, Prog. Dev. Specialist, U. of OK.	*What Do Adults Want? A Study of the Cont. Ed. Needs of Adults in Vermont* Dr. John Vogelsang, Dir. of Cont. Ed. Needs Assessment Project, Champlain College, Vermont	*Psychophysiological Methodologies for the Assessment of Community "Stress Education" Programs*-George Stotelmyer Everly, Jr., Ph.D.-Lecturer-Counseling and Personnel Services, Univ. of Maryland
11:00-11:45	*The Business of Business Education*-Rex L. LaMore, Community Dev. Specialist Center for Urban Affairs, MSU & Tyler Newton, Program Asst., Center for Urban Affairs, MSU	*Education, Employment & Income: The Financial Rewards of Gen. Ed. & Voc. Ed.*-Morton Gordon, Susan M. Quattrociocchi-Prof. of Adult Ed. & student at Univ. of Michigan	*A Methodological Strategy for the Study of the Mal-effects of Adult Ed.*-John A. Kovach, Dept. of Sociology, The American University, Washington, DC
11:50-12:30	*Adult Students-What are They Searching For?*-Theresa Harville, Counselor, Catonsville Community College, Maryland	*Patterns of Participation in Life Long Learning Activities of Parents with Children in Alternative Public Schools*-David J. Pratto, Dept. of Soc., UNC(Greensboro) & Robert N. Jackson, Dept. of Adult & Community Ed., NC State U.	*A Reason-Analytic Approach to Studying Self-Help Volunteers: Notes on an Under-utilized Research Method*-Norma M. Raiff, Asst. Prof. of Sociology, West Va. University, Morgantown
12:30-2:00	LUNCH		
	Coordinator: James C. Thomson, Jr., Deputy Dir., Maryland Service Corps	Coordinator: Carol Hoare, Consultant, Adult Ed.,Program Design, Wash., DC	Coordinator: Dr. Robert L. David, Asst. Prof., Dept. of Sociology, The American University
2:00-2:40	*Thoughts & Questions on Citizen Participation*-Ann Tourigny, Lecturer, Dept. of Family and Community Development, Univ. of MD		*Of Calipers and Steamshovels: The Case for the Use of Ipsative Measures in Applied Research*-Ned L. Gaylin, Prof. of Family & Community Dev., U. of Maryland
2:45-3:25	*Volunteering: A Practise in Search of a Theory*-Mary C. DeCarlo, Ph.D., Assoc. Prof., Antioch University, Baltimore, MD	*Where Would You Go? A Study of Residents' Awareness of Community Services in a Rural County*-Eugene Owen, Research Asst., Research Team in Applied Soc. Sciences, Univ. of Md.	
3:30-4:10	*Educational Priorities Among Members of Community Volunteer Groups*-Thomas D. Queisser, Assoc. Research Scientist, American Inst. for Research, Cambridge, MA	*The Influence of Cover Illustration & Title on the Free-choice Selection of Extension Pamphlets from a Display Board*-Curtis Trent, Prof., Dept. of Adult & Cont. Community College Ed., NC State Univ.	*Participatory Evaluation in Nonformal Education*-David C. Kinsey, Assoc. Prof., School of Education, Univ. of Massachusetts
4:10-4:30	BREAK		
4:30-5:25	Coordinator: Maurice Spencer, Assistant Director, 4-H and Youth, Md. Cooperative Extension Service	Coordinator: Dr. Loren Goyen. Assoc. Prof., Adult Ed., Univ. of The District of Columbia	Coordinator: Dr. Leroy B. Allen Director, Center for Adult and Community Education, University of Delaware
4:30-5:25	*A Study of Blacks in Glenarden and Their Attitudes Toward Volunteerism*-Viola F. Mason, Extension Agent-4-H & Youth, Md. Cooperative Extension & Gene C. Whaples, Assoc. Prof., Dept. of Ag.& Ext. Ed., Univ. of Maryland	*Management Practices Leading to Program Productivity and Sustained Local Funding, NY State Coop. Ext., 1976*-H. Peter Warnock, Senior Extension Assoc., Cornell Ithaca, New York	*Non-traditional Higher Education-An Impact Study on the Adult Learner*-Dr. Robert L. David, Asst. Prof., Dept. of Soc. & Lenore Saltman, Dir. of Planning for Div. of Cont. Ed., The American University
5:30-6:10	*A Survey of Adult Volunteers Who Work With Low Income Youth in 4-H Programs*-Anne L. Heinsohn, Asst. Prof. of Ext. Ed. & Robert B. Lewis, Assoc. Prof. of Ag. Ed., Pennsylvania State U.	*An Individualized vs. An Ecological Model of Change: Implications for Lifelong Learning*-Janice Earle, Doctoral student, College of Education, University of Maryland	*Perceptions of the Role of Extension Home Economics Specialists in Maryland*-Martha M. Myers, Extension Home Economist, Md. Cooperative Extension Service & Gene C. Whaples, Assoc. Prof., Dept. of Ag. & Ext. Ed., Univ. of Maryland
6:10-7:00	WINE AND CHEESE		

JANUARY 11

	SYMPOSIUMS		PAPERS
	Older Adult	Environmental	International
9:15-10:45	Coordinator: Dr. Robert Snyder, Prof. & Chairman of Adult Education, Temple University, Phila.	Dr. Jack Wheatley, Assoc. Prof., Environmental Education, Univ. of Maryland	Dr. Richard L. Hopkins Assoc. Prof., Social Foundations of Education, University of Maryland
	Public Policy Issues on Lifelong Learning and Older Persons: *Perspectives on Lifelong Learning and the Older Adult*-Sandra Timmermann, Head, Institute of Lifetime Learning, Nat. Retired Persons, Washington, DC.	*Interpretive Program Evaluation with Traditional Administrative Accountability Parameters*-Douglas M. Kudson, Assoc. Prof. & Colleen F. Morfoot, Professional Asst., Dept. of For. & Nat. Resources, Purdue University, IN	
	Tuition Policies & Older Learners: Policy Implications on the State & Local Levels-Kathleen Chelsvig, Assoc. Head, Inst. of Lifetime Learning, Nat. Retired Teachers Assoc., AARP, Washington, DC.	*Factors Influencing Attendance at Naturalists' Programs*-Jerry H. Reyburn, Assoc. Prof. of Forest Resources Extension, Pa. State Univ.	*Two Uses of Life-Long Learning in the Disaster Assistance Field*-Gudrum Hartif Huden, Program Analyst, Office of U.S. Foreign Disaster Assistance, Agency for International Dev., Dept. of State, Washington, DC
	Federal Support of Learning Opportunities for Older Adults-Pamela Christoffel, Research & Dev. Associate, The College Board, Washington, DC	*A Simplified Monitoring Instrument & Methodology for Evaluating Clientele Needs & Satisfaction Levels at Nature Centers*-Loren W. Lustig, Park Naturalist; Louise C. Lustig, Computer Science Librarian, Emmett Wright, Science Teaching Center, Univ. of Maryland	*Non-formal Education in Africa: The Past as Prologue*-D. Merrill Ewert, Asst. Prof., Dept. of Ag. & Ext. Ed., Univ. of Md., & Nancy Heisey, Asst. Dir. for Africa, Mennonite Central Committee, Akron, PA

	PAPERS		
	Section A	Section B	Section C
	Coordinator: Dr. Keith E. Glancy, Director, Division of Special Programs, The John Hopkins University, MD	Coordinator: Dr. Mike Marquardt, Training & Evaluation, Overseas Education Fund, VA	Coordinator: Dr. Wayne Bragg, Assoc. Prof. of Soc. Sci. & Dir. of Human Needs & Global Resources Prog., Wheaton College, IL
10:50-11:30	*Opposition to the Theory & Practice of Life-Long Learning*-Daniel P. Huden, Assoc. Prof., College of Ed., U. of Maryland	*Towards an Assessment of Adult Learners' Reasons for Participating in Educational Study: A Typological Analysis*-Barry R. Morstain, Assoc. Prof., College of Urban Affairs & Public Policy, Univ. of Del.	*A Model Instructional Design for Community Re-Entry of Institutionalized Adults*-Hilda Koehnlein, Coordinator, Adult Ed., Crownsville Hospital Center, MD
11:35-12:15	*Toward a Mixed-Age Curriculum Option*-Judith P. Ruchkin, Assoc. Prof., Dept. of Secondary Ed., Univ. of Maryland	*Contemporary Leisure Research: Implications for Nonformal Leisure Education*-Ronald P. Reynolds, Assoc. Prof., Dept. of Recreation, Va. Commonwealth University, VA	*The Footsteps Experience: Formative Evaluation in the Development of Learning Materials for Adults*-Carol M. Novalis, Technical Manager, Applied Mgt. Sciences, Silver Spring, MD
12:15-1:30	LUNCH		
	Coordinator: Dr. Robert F. Carbone, Prof., Administration Supervision & Curriculum, Univ. of Md.	Coordinator: Dr. Harvey Shelton, Asst. Director, Md. Cooperative Extension Service	Coordinator: Dr. Gerald Hanberry, Director of Continuing Education, Prince Georges Community College, MD
1:30-2:10	*Factors Affecting Participation of Over-sixty Adults in Nonformal Adult Education Programs*-Penny Love, Counsellor, Baltimore City Public Schools; Betty Seidel, Baltimore City Health Dept., Maryland	*The Effects of Environment Education at a Recreation Day Camp on the Behavior of Urban Children*-Catherine L. Formwalt, Park Naturalist & Craig W. Colton, Asst. Prof., Dept. of Recreation, U. of Maryland	*Full-time Faculty Members' Perceptions of & Involvement in Community Services at Selected Community Colleges*-Dr. Dennis F. Michaels, Graduate in Adult Ed., Ohio State University
2:15-2:55	*Reminiscence: A Nonformal Educational Technique for the Aged*-George A. Hughston Asst. Prof., Va. Polytechnic Institute & State University		*Determinants of Participation in Jewish Adult Education*-Kenneth J. Campbell, Dept. of Economics, Gallaudet College, Washington, DC

Steering Committee

Dr. Leroy B. Allen
Director
Center for Adult and Community Education
University of Delaware
Newark, DE 19711

Dr. Ida Brandon
Director of Continuing Education
Bowie State College
Bowie, MD 20715

Dr. Beverly Cassara
President, Adult Education Association, Metropolitan Washington
Dean for Graduate Studies
University of D.C.
Washington, D.C. 20001

*Dr. Merrill Ewert
Representing Maryland Association of Adult Education
Assistant Professor
Extension & Continuing Education
Department of Agricultural & Extension Education
University of Maryland
College Park, MD 20742

Dr. Keith Glancy
Director, Division of Special Programs
The Johns Hopkins University
Baltimore, MD 21218

Dr. Gerald Hanberry, Director
Community Development
Prince Georges Community College
Largo, MD 20870

Dr. Albert J. Klavon
Assistant Professor
Extension and Continuing Education
Department of Agricultural & Extension Education
University of Maryland
College Park, MD 20742

Mr. John W. Lathrop
Assistant Director
Program Development, Room 2119B
Adult Education Center
College Park, MD 20742

Ms. Lenore Saltman
Coordinator of APEL Program and Director of Planning for the Division of Continuing Education
The American University
Washington, D.C. 20016

Dr. Robert Snyder
Professor
Department of Adult Education
Temple University
Philadelphia, PA 19122

Mr. Charles Tilden
Director, Maryland Service Corps
Room 310, 1123 W. Eutaw Street
Baltimore, MD 21201

*Dr. Gene C. Whaples
Associate Professor
Faculty and Staff Development Leader
Md. Cooperative Extension Service
Department of Agricultural & Extension Education
University of Maryland
College Park, MD 20742

Dr. Jack Wheatley
Associate Professor
Environmental Education
Department of Agricultural and Extension Education
University of Maryland
College Park, MD 20742

Dr. Beryl W. Williams, Director
Center for Continuing Education
Morgan State University
Baltimore, MD 21239

Dr. Emmett L. Wright
Assistant Professor
Environmental Education
Department of Secondary Education
University of Maryland
College Park, MD 20742

*Co-Chairman

THE LIFELONG LEARNING RESEARCH
CONFERENCE WAS SPONSORED BY:

Maryland Cooperative Extension Service

As part of the total University, the Cooperative Extension Service takes the University of Maryland to the people of Maryland, wherever they are. In its role as the "off-campus, non-credit, out-of-classroom" arm of the University, it extends the classroom to all parts of the State. The Maryland Cooperative Extension Service is known for its programs in agriculture (including care of urban home ground and gardens), home economics, 4-H and youth, community and resource development, and marine science. Off-campus faculty are located in each county and in Baltimore City, Joint support comes from the federal government for both 1862 and 1890 Land Grant institutions; and from the State and all 23 counties and Baltimore City in Maryland. General administrative offices of the Maryland Cooperative Extension Service are located at the College Park campus, and the administration of the 1890 program (an integral part of the total MCES effort) is from offices of the University of Maryland Eastern Shore campus at Princess Anne.

OTHER SPONSORS INCLUDE

Department of Agricultural and Extension Education

The Department of Agricultural and Extension Education, University of Maryland, College Park, is a multidisciplinary department featuring graduate programs in Adult, Continuing and Extension Education. With a Graduate Faculty membership of 12, the department has specialties and interests in international education, community development, youth leadership and development, environmental education, community services and teacher education in agriculture. The Department has traditionally maintained close working relationships with the Federal Extension Service, U. S. Office of Education, the National 4-H Center, the National FFA Center and the Maryland State Department of Education. In addition to the Adult, Continuing and Extension Education Graduate Program, graduate programs in Community Development and Rural Sociology, Environmental Education and Agricultural Education are offered along with an undergraduate teacher education program in agriculture. For further information write: Department of Agricultural and Extension Education, University of Maryland, Room 1109, Symons Hall, College Park, Maryland 20742

University of Maryland University College Conference and Institute Division

Informal short courses and intensive training programs are offered by the Conferences and Institutes Division for students wishing to take course work on a non-credit basis at the University level. Programs address personal and professional development and advancement in general knowledge. Career oriented courses are awarded Continuing Education Units (CEUs) -- a nationally recognized method of evaluating non-credit professional courses. Courses are offered in College Park, Baltimore, Annapolis and other statewide and national geographic locations.

The Adult Education Association/USA

The Adult Education Association is the national association of individuals and institutions involved in the education of adults. AEA's primary goal is to increase the opportunities for lifelong learning for all citizens. The Association serves as a forum for identification of emerging of issues in the wide field of adult education and as a vehicle for interpretation and dialogue. Serving as the principal voice of adult education, AEA's central role is to promote and develop adult education. This is done by affording opportunites for adult educators, practitioners and learners to increase their competencies, and by assisting organizations and agencies in developing adult education policies, programs and activities for the millions of adult learners in this country and throughout the world. For further information write: Adult Education Association of the United States of America, 810 Eighteenth Street, N.W., Washington, D.C. 20006

Maryland Association for Adult Education

Maryland Association for Adult Education (MAAE) is an affiliate of the Adult Education Association of the U.S.A. and has the prime responsibility of supporting adult/continuing education in Maryland. MAAE supports the philosophy of "life-long learning". It recognizes that persons are constantly faced with new and challenging tasks in life requiring additional skills, further direction, more information. It contends that the educational experience includes all aspects of the community including social change agencies, educational institutions, career development facilities, religious organizations, etc. Members of MAAE represent all walks of life (adult education instructors, library personnel, representatives from labor and industry, administrators from correctional institutions, consumer education specialists, religious leaders, etc.) having a common concern -- More effective educational experiences for adults in Maryland. For further information contact: Hilda Koehnlein, President, MAAE, 3809 Glenmore Avenue, Baltimore, Maryland 21206

The Adult Education Association of Metropolitan Washington

The Adult Education Association of Metropolitan Washington is a 'state' affiliate of the Adult Education Association of the United States of America (AEA/USA), whose major purpose as stated in its constitution is "to further the concept of education as a process continuing throughout life." Membership gives you the opportunity to: participate in an active and growing organization of adult educators; exchange ideas with colleagues at regular meetings of the association; learn about current trends and innovations in the field; work with recognized national leaders in the many areas comprising adult education; voice your concerns for the future of adult education through the legislative process; and receive the newsletter of AEA/MW. For further information write: The Adult Education Association of Metropolitan Washington, 810 Eighteenth Street, N.W., Washington, D.C. 20006

Maryland Service Corps

The Maryland Service Corps is a state volunteer agency which encourages and develops programs of public service which involve citizens of all ages in meeting the critical human needs of the states' residents. Volunteers are recruited to serve in all phases of state and local government, and in private non-profit agencies. Volunteers are trained in the general field of volunteerism and in their specific service assignments. They serve under the immediate supervision of the host agency in which they are placed and under the general supervision of the Service Corps. For further information contact: Mr. Charles Tildon, Director Maryland Service Corps, Room 310, 1123 N. Eutaw Street, Baltimore, Maryland 21201

TABLE OF CONTENTS

PREFACE ii

OPENING SESSION iii

PROGRAM iv

STEERING COMMITTEE vi

SPONSORS vii

PAPERS

CHOICE OF LEARNING FORMAT AS A FUNCTION OF THREE CONSTRUCTS: PERSONALITY VARIABLES, COGNITIVE STYLE, AND LOCUS OF CONTROL
Elizabeth Anne Bertinot 1

ABSTRACT FOR DETERMINANTS OF PARTICIPATION IN JEWISH ADULT EDUCATION
Kenneth J. Campbell 3

NON-TRADITIONAL HIGHER EDUCATION AS IMPACT ON THE ADULT LEARNER
Robert L. David and Lenore Saltman 5

VOLUNTEERING: A PRACTISE IN SEARCH OF A THEORY REFLECTIONS ON THE SOCIALIZATION ASPECTS OF VOLUNTEERING AND VOLUNTARY ACTION IMPLICATIONS FOR LIFELONG LEARNING
Mary C. DeCarlo 7

AN INDIVIDUALIZED AND AN ECOLOGICAL MODEL OF CHANGE: IMPLICATIONS FOR LIFELONG LEARNING
Janice Earle 9

PSYCHOPHYSIOLOGICAL AND BIOFEEDBACK METHODOLOGIES FOR THE ASSESSMENT OF COMMUNITY "STRESS EDUCATION" PROGRAMS
George Stoteimyer Everly, Jr. 11

NONFORMAL EDUCATION IN AFRICA: THE PAST AS PROLOGUE
D. Merrill Ewert and Nancy Heisey 13

THE EFFECTS OF ENVIRONMENT EDUCATION AT A RECREATION DAY CAMP ON THE BEHAVIOR OF URBAN CHILDREN
Catherine L. Formwalt and Craig W. Colton 15

OF CALIPERS AND STEAMSHOVELS: THE CASE FOR THE USE OF IPSATIVE MEASURES IN APPLIED RESEARCH
Ned L. Gaylin 17

EDUCATION, EMPLOYMENT AND INCOME: THE FINANCIAL REWARDS OF GENERAL EDUCATION AND VOCATIONAL EDUCATION
Morton Gordon and Susan Quattrociocchi 19

ADULT STUDENTS: WHAT ARE THEY SEARCHING FOR?
Theresa S. Harville 21

A SURVEY OF ADULT VOLUNTEERS WHO WORK WITH LOW INCOME YOUTH IN 4-H PROGRAMS
Anne L. Heinsohn and Robert B. Lewis. 23

OPPOSITION TO THE THEORY AND PRACTICE OF LIFE-LONG LEARNING
Daniel P. Huden 25

TWO USES OF LIFE-LONG LEARNING IN THE DISASTER ASSISTANCE FIELD
Gudrun Hartig Huden 27

REMINISCENCE: A NONFORMAL EDUCATIONAL TECHNIQUE FOR THE AGED
George A. Hughston. 29

PARTICIPATORY EVALUATION IN NONFORMAL EDUCATION
David C. Kinsey 30

A MODEL INSTRUCTIONAL DESIGN FOR COMMUNITY RE-ENTRY OF INSTITUTIONALIZED ADULTS
Hilda Koehnlein 32

ABSTRACT REMOVED - PAPER NOT PRESENTED. 34

THE BUSINESS OF BUSINESS EDUCATION: A SMALL BUSINESS ENTREPRENEUR PROGRAM
Rex L. LaMore and Tyler S. Newton 36

FACTORS AFFECTING PARTICIPATION OF OVER-SIXTY ADULTS IN NONFORMAL ADULT EDUCATION PROGRAMS
Penny Love and Betty Seidel 38

A STUDY OF BLACKS IN GLENARDEN AND THEIR ATTITUDES TOWARD VOLUNTEERISM
Viola F. Mason and Gene C. Whaples. 40

FULL-TIME FACULTY MEMBERS' PERCEPTIONS OF AND INVOLVEMENT IN COMMUNITY SERVICES AT SELECTED COMMUNITY COLLEGES
Dennis F. Michaels. 42

TOWARD AN ASSESSMENT OF ADULT LEARNERS' REASONS FOR PARTICIPATING IN EDUCATIONAL STUDY: A TYPOLOGICAL ANALYSIS
Barry R. Morstain 44

PERCEPTIONS OF THE ROLE OF EXTENSION HOME ECONOMICS SPECIALISTS IN MARYLAND
Martha M. Myers and Gene C. Whaples 46

THE FOOTSTEPS EXPERIENCE: FORMATIVE EVALUATION IN THE DEVELOPMENT OF LEARNING MATERIALS FOR ADULTS
Carol M. Novalis. 48

PAPERS

WHERE WOULD YOU GO? A STUDY OF RESIDENTS' AWARENESS OF COMMUNITY SERVICES IN A RURAL COUNTY
Eugene H. Owen 50

PATTERNS OF PARTICIPATION IN LIFE LONG LEARNING ACTIVITIES OF PARENTS WITH CHILDREN IN ALTERNATIVE PUBLIC SCHOOLS
David J. Pratto and Robert N. Jackson 52

EDUCATIONAL PRIORITIES AMONG MEMBERS OF COMMUNITY VOLUNTEER GROUPS
Thomas D. Queisser 54

A REASON-ANALYTIC APPROACH TO STUDYING SELF-HELP VOLUNTEERS: NOTES ON AN UNDERUTILIZED RESEARCH METHOD
Norma R. Raiff 56

CONTEMPORARY LEISURE RESEARCH: IMPLICATIONS FOR NONFORMAL LEISURE EDUCATION
Ronald P. Reynolds 58

TOWARD A MIXED-AGE SECONDARY CURRICULUM OPTION
Judith P. Ruchkin, et al. 60

THOUGHTS AND QUESTIONS ON CITIZEN PARTICIPATION
Ann Tourigny 62

THE INFLUENCE OF COVER ILLUSTRATIONS AND TITLE ON THE FREE-CHOICE SELECTION OF EXTENSION PAMPHLETS FROM A DISPLAY BOARD
Curtis Trent 64

WHAT DO ADULTS WANT? A SURVEY OF THE CONTINUING EDUCATION NEEDS OF ADULTS IN VERMONT
John Vogelsang 66

MANAGEMENT PRACTICES LEADING TO PROGRAM PRODUCTIVITY AND SUSTAINED LOCAL FUNDING, NEW YORK STATE COOPERATIVE EXTENSION, 1976
H. Peter Warnock 68

SYMPOSIA

PUBLIC POLICY ISSUES ON LIFE LONG LEARNING AND OLDER PERSONS
Sandra Timmermann, Pamela Christoffel, and Kathleen Chelsvig 70

PERSPECTIVES ON LIFELONG LEARNING AND THE OLDER ADULT
Sandra Timmerman 71

TUITION POLICIES AND OLDER LEARNERS: POLICY IMPLICATIONS ON THE STATE AND LOCAL LEVELS
Kathleen Chelsvig 72

FEDERAL SUPPORT OF LEARNING OPPORTUNITIES FOR OLDER ADULTS
Pamela Christoffel 73

EVALUATION OF PROGRAMS, ATTENDANCE, AND CLIENTELE NEEDS IN PARKS AND NATURE CENTERS
Jack Wheatley 74

A SIMPLIFIED MONITORING INSTRUMENT AND METHODOLOGY FOR EVALUATING CLIENTELE NEEDS AND SATISFACTION LEVELS AT NATURE CENTERS
Loren W. Lustig, Louise M. Lustig, and Emmett L. Wright 75

INTERPRETIVE PROGRAM EVALUATION WITH TRADITIONAL ADMINISTRATIVE ACCOUNTABILITY PARAMETERS
Colleen F. Morfoot and Douglas M. Knudson 77

FACTORS INFLUENCING ATTENDANCE AT NATURALISTS' PROGRAMS
Jerry H. Reyburn 79

KEYNOTE ADDRESS
THE NEED FOR BRIDGING THE GAP FROM RESEARCH TO PRACTICE IN LIFELONG LEARNING
Donnie Dutton 81

PARTICIPANT LIST. 87

CHOICE OF LEARNING FORMAT AS A FUNCTION OF THREE CONSTRUCTS: PERSONALITY VARIABLES, COGNITIVE STYLE, AND LOCUS OF CONTROL

Elizabeth Anne Bertinot, Ph.D.[1]

The purpose of this study was to investigate the relationship between choice of learning format and personality type, cognitive construct, and locus of control. The major problem was to determine if choice of learning format was a function of selected individual characteristics.

Procedure

A sample of 70 undergraduate university students were tested using the Myers-Briggs Type Indicator (MBTI), Group Embedded Figures Test (GEFT), and Rotter's I-E Scale.

In the first stage of analysis a frequency distribution was developed to cross-tabulate demographic data. Categorical scores were used for the groupings. Females scored higher than males among feeling types which supports findings by Myers.[2] There was an age trend in the I-E Scale showing more internals over age 33. Males scored higher among the perceptive type scores than females.

In the second stage a scatterplot was developed to assess curvilinear relationships and relationships within certain variable ranges. No curvilinear relationships were found nor were relationships within variable ranges found.

In the third stage of analysis individual Chi Square Tests were used to compare obtained frequencies of categorical scores with theoretical frequencies. For the MBTI scores the obtained frequencies were within the range of the theoretical distributions reported by Myers.[3] For the GEFT there was no normative data available. However Witkin et al. showed no difference in the mean GEFT scores in college drop outs and in non-science graduate students.[4] From these data the writer assumed a normal

---

[1]Elizabeth Anne Bertinot, Ph.D., Program Development Specialist, College of Liberal Studies, U. of Oklahoma, 1700 Asp, Norman, Oklahoma 73037.

[2]Isabel Briggs Myers, The Myers-Briggs Type Indicator (Palo Alto, Calif.: Consulting Psychologists Press, 1962), p. 16

[3]Ibid. p. 14-15.

[4]Witkin, H. A.; Moore, Carol Ann; Oltman, Philip K.; Goodenough, Donald R.; Friedman, Florence; Owen, David; and Raskin, Evelyn. "Role of the Field-Dependent and Field-Independent Cognitive Styles in Academic Evolution: A Longitudinal Study," Journal of Educational Psychology, 1977, Vol. 69, No. 3, 197-111.

distribution of the field-dependent-independent construct in undergraduate study. The Chi Square tests supported this assumption. For Rotter's I-E Scale, no studies were available that gave normative data for undergraduate students. The Chi Square Test showed a significant difference ($p<.01$) in externals and internals among undergraduate students.

In the fourth stage a stepwise multiple regression tested for selected personality variables, cognitive construct, and locus of control as predictors of educational format. The stepwise multiple regression did not yield significant correlation coefficients. Locus of Control was entered at Step 1 and accounted for only 4% of the variance.

In a second stepwise multiple regression analysis, age was run as a predictor variable against test scores. This analysis was computed on the nontraditional educational sample which had an age range of 23-62. No significant correlations were found between age and test scores.

Conclusions

This study indicates that subjects in the traditional educational format are samples from the same population, and that they are part of the population reported by Myers.[5]

While the MBTI may predict those subjects who attend college from those who do not go to college, this study indicates that selected personality characteristics do not predict choice of learning format.

Since there is no normative data for cognitive style subjects and for locus of control subjects in an educational format, this study sets up a normative model for both tests.

No significant relationships were indicated between test scores and choice of format. In the second stepwise multiple regression analysis, age was tested against test scores as a predictor variable. Age did not predict performance on any of the tests. These findings are at variance with studies on field-dependence-independence by Schwartz and Karp,[6] and Comalli,[7] but support a report by Kogan.[8]

---

[5]Myers, Myers-Briggs Type Indicator, p. 33.

[6]D. W. Schwartz and S. A. Karp, "Field Dependence in a Geriatric Population," Perception and Motor Skills, 1967, Vol. 24, p. 495-504.

[7]Peter E. Comalli, Jr., "Life-Span Changes in Visual Perception," in Life-Span Developmental Psychology Research and Theory, Edited by L. R. Goulet and T. B. Baltes, (New York: Academic Press, 1970). p. 221-222.

[8]Nathan Kogan, "Creativity and Cognitive Style: A Life Span Perspective," in Life-Span Developmental Psychology Personality and Socialization, Edited by Paul B. Baltes and K. Warner Schaie (New York: Academic Press, 1973), p. 167.

ABSTRACT FOR DETERMINANTS OF PARTICIPATION IN JEWISH ADULT EDUCATION

Kenneth J. Campbell[1]

The purpose of this dissertation was to identify the determinants of participation in Jewish adult education. The primary focus of this dissertation was upon the relationship between the rate of participation in Jewish adult education courses and the commonality of goals of selected leaders and congregants. A secondary focus of this study was the relationship between participation in Jewish adult education courses and the amount of money spent on these courses, the number of courses offered, the level of education (secular and Jewish) of congregants and the occupations of congregants.

The sample drawn for study included eleven Conservative congregations and six Reform congregations in suburban Washington, D.C. In each congregation, instruments were sent to the rabbi and thirty randomly selected congregants. Twenty of the congregants were women, and ten were men.

The instruments included were: "Goals of Jewish Adult Education," a "Data Sheet for Rabbis," and a "Data Sheet for Congregants." The first instrument was developed with the help of five experts in Jewish adult education and through a pilot study. This instrument ("Goals of Jewish Adult Education") utilized a Likert-type scale. The rate of response to these instruments was 49.8 percent.

The information from the instruments was subjected to simple correlation and analysis of variance. The dependent variable was the rate of participation. The independent variables were: the commonality of goals of leaders (rabbis) and congregants, the amount of money spent on these courses, the number of courses offered, the level of education (secular and Jewish) of congregants, and the occupations of congregants. A distance measure was also utilized in this study to find the magnitude of the difference between rabbis and congregants on the goals. The test was used to see if the coefficients of correlation were significant. Both the .05 and the .01 levels of significance were used. The information was coded, punched and analyzed through the Statistical Package for the Social Sciences program at the computer center of the University of Maryland.

The following results were obtained. There was no statistically significant relationship between the rate of participation in Jewish adult education and the commonality of goals between rabbis and congregants. As the magnitude of differences in goals (for Judaism in general) between Reform rabbis and congregants increased, the rate of participation tended to increase. There

---

[1]Kenneth J. Campbell, Associate Professor, Department of Economics, Gallaudet College, Washington, D.C. 20002

was no statistically significant relationship between childhood attendance at various types of Jewish education and later participation in Jewish adult education. The level of secular education was negatively correlated with participation in Jewish adult education courses. Conservative educators and sales people tended to participate in Jewish adult education more so than did Conservative congregants in other occupational groups. This was also true when Conservative educators and sales people were compared to Reform congregants regardless of occupational classification.

NON-TRADITIONAL HIGHER EDUCATION: AN IMPACT STUDY ON THE ADULT LEARNER

Robert L. David and Lenore Saltman[1]

This research assesses the impact of a non-traditional, continuing education program on adult participants. The program awards undergraduate college credit for prior learning and is designed to aid the adult student either entering or returning to college.

While much important work in continuing education research is being accomplished in the fields of learning and instruction (Even, 1978), the results of this learning and instruction have yet to be systematically evaluated. Indeed, needs assessments market surveys and participant questionnaires are common techniques used to evaluate and determine program and budget priorities. However formal studies once students finish a course or program are rare. Research is costly, time consuming, and unless carefully planned, not always useful.

This study is the beginning of a series of in-depth research efforts on the effects of continuing education on the adult learner. Structured and non-structured interviews were conducted. The students in the program were surveyed prior to, during, and after the program was completed.

A general profile reveals that the students are 75% women, median age 39 years, and 25% men, median age 33 years. Of the total population of 108 students, 70% have had some college work for which they received credit. Over 90% have participated in previous structured learning situations either job or leisure related.

---

[1]Robert L. David, Assistant Professor, Department of Sociology, McCabe Hall, The American University, Washington, D.C. 20016 and Lenore Saltman, Director for Planning and Coordinator, Assessment of Prior Experiential Learning Program, Division of Continuing Education, McKinley Building, The American University, Washington, D.C. 20016

The program is described as an aid to the adult student who wishes to pursue a bachelor's degree in that it will shorten the time and save on the cost of an undergraduate degree at the institution.

Specific information sought included:

1. Adult student's motivation for participation,
2. Did the program meet student's expectations,
3. What intellectual growth occured, from the student's and instructor's perspective,
4. What impact did participation in the program have on the student's academic plans, career goals and personal life.

The results of this research are to be used to make changes in the assessment of prior experiential learning program and to review policies and procedures in support services and program development for continuing education.

Mary Jane Even, "Current and Future Trends in Adult Education Research". Lifelong Learning: The Adult Years, November, 1978, Washington, D. C., pp. 8-11.

VOLUNTEERING: A PRACTISE IN SEARCH OF A THEORY
REFLECTIONS ON THE SOCIALIZATION ASPECTS OF VOLUNTEERING AND VOLUNTARY ACTION
IMPLICATIONS FOR LIFELONG LEARNING

Mary C. DeCarlo[1]

The thesis of this paper is that volunteering and voluntary action serves as a socialization vehicle, and as such it is an educational alternative. Voluntary action provides the opportunity to develop and maintain creative, innovative leadership skills. This capability becomes increasingly important as we enter a post-industrial society. For in that post-industrial society the public and private sector will share responsibility for the achievement of national goals in a way never before attempted.

Socialization as defined by social psychologists denotes the process by which an individual learns to adjust to the group by acquiring social behavior of which the group approves. Stated another way, socialization refers to the process by which persons acquire the knowledge, skills, and dispositions that make them more or less able members of their society. Although the term socialization is generally used in relation to children, the process is a general one and is therefore applicable also to adults.

There are many ways that adults are socialized through voluntary action. According to David Horton Smith (1972)[2] voluntary action may take many forms:

1. Service oriented voluntarism: traditional form of voluntarism, and one that usually comes to mind when volunteering is mentioned.

2. Issue oriented or cause oriented voluntarism: the domain of the social reform groups. This could be considered civic socialization.

3. Self-expressive voluntarism: engaged in for its own sake and for personal self-expression and self-realization.

4. Occupational/economic self interest: furthers the occupational and/or economic interest of participants. Includes membership in professional associations.

5. Philantropic/funding voluntarism: primary emphasis on raising and distributing funds explicily for philanthropic or voluntary action purposes.

---

[1]Mary C. DeCarlo, Associate Professor and Coordinator, Volunteer Administration Component of the Planning and Administration Program, Antioch University/Maryland 1106 North Charles Street, Baltimore, Maryland 21201.

[2]David Horton Smith, Research and Communication Needs in Voluntary Action Center for Voluntary Society, Washington, D. C. 1972.

The research to determine the impact of voluntary action on learning (changes in beliefs, dispositions, emotions, capacities, and behavior) is not "terribly compelling," according to David Horton Smith (1973)[3] However, recently there has been some attempt at articulation of skills acquired in support of women's desire to use their voluntary action experience in entering the occupational market. This coupled with the work of the Cooperative Assessment for Experiential Learning (CAEL) has provided some identification of these skills. Examples include the skill of managing (planning, directing, chairing, coordinating, organizing, programming and designing) as well as supervising (determining, interpreting, assigning and maintaining.)[4]

With regard to the theory of adult learning, Josephine Flaherty (1971)[5] suggests that individuals solve problems or learn by one of two methods: either an individual uses his "fluid" or biological factors inherent in intellectual development or he calls upon his store of "crystallized" intelligence which is the result of experience, education, and cultural background. While there is little one can do to influence one's inborn biological tendencies, one can do a great deal with regard to developing a repertoire of experience particularly using the vehicle of volunteering and voluntary action.

Voluntary action, voluntary association, volunteering is an almost perfect system for continuing to develop interpersonal skills, attitudes, and knowledge; a system for socialization. It is the logical vehicle for expanded personal and social involvement in the post-industrial society. According to John D. Rockefeller 3rd, the U. S. is about to embark on a humanistic revolution. He maintains that individual initiative is the key to success. John Garner states it another way. For the self-renewing individual the development of his own potentialities and the process of self-discovery must never end.

---

[3]David Horton Smith, "The Impact of Voluntary Action," Voluntary Action Research, 1973. Lexington Books, D. C. Heath and Company, Lexington, Mass. 1973.

[4]Cooperative Assessment of Experiential Learning, The Learning and Assessment of Interpersonal Skills: Guidelines for Students, CAEL Working Paper No. 5, Educational Testing Service, Princeton, N. J. 1975.

[5]Josephine Flaherty, "Some Thoughts on the Assessment of Learning Ability" J. R. Kidd, (Ed.) How Adults Learn, Association Press, New York, 1973.

[6]John D. Rockefeller, 3rd., The Second American Revolution: Some Personal Observations, Harper and Row, New York, 1973.

[7]John W. Gardner, Self-Renewal: The Individual and the Innovative Society, Harper and Row, New York, 1963.

AN INDIVIDUALIZED AND AN ECOLOGICAL MODEL OF CHANGE: IMPLICATIONS FOR LIFELONG LEARNING

Janice Earle[1]

Adult and continuing education constitute the most rapidly growing area in American education. (National Center for Education Statistics, 1976) The implementation of lifelong learning, therefore, may emerge as one of the major educational innovations of the 1970's. This movement represents a response to an altered understanding of the learning process, to technological development, to changing work patterns and lifestyles, and to the need to increase skills for more effective job performance. (Jonsen, 1978) A philosophy of lifelong learning calls for: changes in the financing of postsecondary education for adults[2]; education that takes place in a wide variety of settings; (Houle, 1972, pp. 91-130) and a redefinition of the teacher-learner relationship. (Rogers, 1969, pp. 137-139)

Two Models for Change

Philosophy does influence practice, so it is important to look at the philosophical frameworks that institutions adopt when implementing institutional change. Two models that discuss institutional change will be examined here. The first, that of Carl Rogers, is based on the theories developed in his client-centered approach to therapy. Rogers (1951, 1969) believes that the same forces that work to change an individual also apply to institutions.

By contrast, Seymour Sarason has developed a model which emphasizes the study of the ecological environment rather than the individual. (Sarason, 1971, 1972) Sarason is interested in investigating the natural history of the change process. By examining the culture of a given setting, such as a classroom or workshop, in a value-neutral way, those factors that work against successful change can be analyzed.

Objectives of the Models

The foundation in Rogers' model is an educational process that will produce a "fully functioning person". Such a person is open to experience, flexible, and self-actualizing. (Rogers, 1969, pp. 282-286) The central factor in becoming such a person is the nature of the facilitator-learner relationship. Rogers (1969, p. 164) downgrades "teaching" equating it with "telling". Facilitation, on the other hand, includes climate setting, clarification of feelings, the organization of resources for learning, and the implementation of those purposes that have meaning to each student. (Rogers, 1969, p. 164)

---

[1]Janice Earle, Doctoral student, College of Education, Department of Administration, Supervision and Curriculum, University of Maryland, College Park, Maryland 20742.

Sarason's objective is not to articulate particular goals as values, but to analyze what in fact the goals are, so that we can understand why: "The more things change, the more they remain the same". (Sarason, 1971, p. 96) The reason so much educational reform is ineffective, he postulates, is that those who plan or administer educational change are not looking at schools in a cultural context.

Implications for Lifelong Learning

According to Rogers, the intensive group experience is the tool for change. When individuals break down defensive behavior and become open to change, they can then act as agents of change in their institutions. When institutions manifest constructive innovation, high morale, and positive interpersonal behaviors, then change has been successful. (Rogers, 1969, pp. 320-321) Rogers' model is weak for looking at institutional change because it is impossible to assess when or to what degree these qualities may be present in an organization. Rogers has, however, described his ideal of the teacher-learner relationship in a way uniquely suited to adult educators.

Sarason is more helpful in analyzing institutional culture, so that factors for change, and those that impede it, can be examined. For example, we must not confuse what we intend with what we accomplish; we must not equate change with improvement; we must carefully assess where to begin any change process; we must have a realistic time perspective; and, we must be willing to consider a universe of alternatives. (Sarason, 1971, pp. 215-224) Thus, each model has something of value for implementing the institutional innovations desirable from a lifelong learning perspective.

NOTES

2. For a thorough discussion of the financial issues, see the May 1978 School Review, "Financing the Learning Society".

REFERENCES

Houle, Cyril O. The Design of Education. San Francisco: Jossey Bass, 1972.

Jonsen, Richard W. "Lifelong Learning: State Policies", School Review, (May 1978): 360-381.

National Center for Education Statistics. The Condition of Education, Washington, D.C.: Government Printing Office, 1976.

Rogers, Carl R. Client-Centered Therapy, Boston: Houghton Mifflin, 1951.

Rogers, Carl R. Freedom to Learn. Columbus: Charles E. Merrill Publishing Company, 1969.

Sarason, Seymour B. The Creation of Settings and the Future Societies. San Francisco: Jossey Bass, 1972.

Sarason, Seymour B. The Culture of the School and the Problem of Change. Boston: Allyn and Bacon, Inc. 1971.

PSYCHOPHYSIOLOGICAL AND BIOFEEDBACK METHODOLOGIES FOR THE ASSESSMENT OF COMMUNITY "STRESS EDUCATION" PROGRAMS

George Stotelmyer Everly, Jr., Ph. D. [1]

Within the last five years, "stress" has become a topic of utmost interest for researchers, clinicians, and average citizens alike. The popularity of the subject can be explained by the fact that research has proven that excessive stress can lead to the erosion of mental and physical health (Selye, 1976) as well as productivity in business and industry (Greenwood, 1978). Therefore, this newly aroused interest in the area of stress has lead to a plethora of stress reduction techniques. One of those techniques is the "stress education" program.

Stress education programs usually consist of seminars/workshops designed to disseminate information and skills which will prove effective in helping the participants reduce the levels of stress in their lives. Stress education programs are currently being offered by universities, community colleges, houses of worship, diverse types of community agencies, and even private practitioners.

In designing any educational program, it is important to include some measure of its efficacy. In the case of stress education programs, the ultimate criterion for determining effectiveness will be the participant's ability to reduce his/her stress levels. Historically, stress has been measured by way of paper and pencil self-report scales. These scales, however, are generally inappropriate to fully assess the participant's stress levels. This is due to the fact that the neurohumoral nature of the stress response is seldom detectable by the chronic stress sufferer except under extremely intense acute stress episodes.

Measuring the efficacy of stress education programs need no longer remain an enigma if more direct methods for assessing neurohumoral activation can be employed. This goal can be accomplished through the utilization of electrophysiological and biofeedback monitoring procedures. Three electrophysiological techniques are of prime interest. Perhaps the most widely used technique to measure stress is electromyography. Electromyographic monitoring entails the measurement of bioelectric signals which emanate from striate muscles before contraction (muscle tension). The bioelectric phenomenon is based upon ionic transport across membranes on a cellular level. Another popular stress measuring technique involves using electronic thermistors to indirectly assess the size of peripheral blood vessels. During stress, these vessels have a tendency to constrict. Finally, brain states can be assessed through the use of electroencephalographic procedures. These procedures measure the level and intensity of

---

[1] George Stotelmyer Everly, Jr. is a Lecturer in the Department of Counseling and Personnel Services, University of Maryland, College Park, Maryland, 20742

bioelectric activations which emanate from the neocortical aspect of the brain. All of the neocortical activity can then be roughly quantified. The higher the neocortical activation, the greater the stress levels; as long as that activity is hemispherically asynchronous.

All three of these measures can serve as effective measures of neurohumoral stress reactivity. Furthermore, each can serve a dual capacity as dependent variable and learning device. The latter is within reason if the participant is made aware of the psychophysiological events as they happen. This is the basis of the biofeedback paradigm which has been proven effective in managing excessive stress levels (Girdano and Everly, in press).

Electrophysiological and biofeedback procedures represent the most valid methods for assessing stress levels and, therefore, are the most useful tools that can be used to measure the efficacy of stress education programs. In addition, the process of rendering to the participant "scientific" data at the end of a training program appears to actually contribute to the participant's overall satisfaction with the training, as well as the tendency for such data to increase the participant's motivation to continue to practice the stress reduction skills learned during the stress education program.

REFERENCES

Girdano, D.A. and Everly, G.S. Controlling Stress and Tension: A Holistic Approach. Englewood Cliffs, N.J.: Prentice-Hall Inc., in press.

Greenwood, J. Management stressors. Reducing Occupational Stress. Washington, D.C.: Public Health Service, 1978.

Selye, H. Stress in Health and Disease. Reading, Mass. : The Butterworth Group, 1976.

NONFORMAL EDUCATION IN AFRICA: THE PAST AS PROLOGUE

D. Merrill Ewert and Nancy Heisey[1]

Development planners have frequently held to the maxim, "when in doubt, educate". This perspective of education as the solution to the problems of developing countries has been widely accepted in Africa and is the focus of this paper.

The paper begins by examining the prevailing view of the relationship of education and development, suggesting that schooling is frequently perceived as the key to social change. Schooling--formal education--it was found, has generated a curriculum that is inappropriate for the African environment, contributed to the separation of learning and experience, and led to the inculcation of alien values in African society. It has also contributed to social stratification and led to the destruction of indigeneous learning systems at great cost to national budgets and the cultural heritage. The benefits of educational development have served the elites in Africa at the expense of those with the greatest needs.

In recognition of the failures of formal education, planners are increasingly turning to nonformal alternatives with the expectation that the problems of schooling can be avoided. This paper argues, however, that nonformal education is no more a panacea to the problems of development than were the early post-independence schools. What is needed for successful nonformal education strategies is not necessarily new and more innovative programs but rather a better understanding of indigeneous teaching/learning concepts. The basic elements of effective nonformal education can be found in indigenous African society so what is really needed is a deeper understanding of the cultural context.

This study reviews some of the basic elements of traditional education systems including the focus on community solidarity, the relationship between learning and the environmental context, the collective nature of instruction, and the creation of structural mechanisms through which people share their knowledge and skills with the young. Many of these principles now posited by nonformal educators as new and innovative already exist in traditional African cultural patterns.

The paper then briefly examines three well-known development schemes in Africa that attempt to incorporate the basic principles of indigenous education. First of all, the brigade movement in Botswana has developed into an ambitious national program to provide training to school leavers in skills such as carpentry, mechanics, handicrafts, and farming. Brigades attempt to be self-supporting and stress the linkages between the centers and the community. Secondly, village polytechnics in Kenya offer training to school

---

[1]D. Merrill Ewert, Assistant Professor, Department of Agricultural and Extension Education, University of Maryland, College Park, Maryland 20742, and Nancy Heisey, Assistant Director for Africa, Mennonite Central Committee, 21 S. 12th. Street, Akron, Pennsylvania 17501.

leavers with curricula based on local needs, always including agriculture. Community members frequently participate as instructors in the teaching process. Polytechnics in some areas also provide continuing consulting services for trainees who have completed the course as well as for other members of the community. Thirdly, a church-related training scheme in northern Nigeria called "Faith and Farm" provides a mechanism through which young men are apprenticed to "master farmers" for one growing season in order to learn new agricultural skills. While all three of these nonformal education schemes differ from many of the more traditional development programs in Africa, each consciously attempts to incorporate some of the significant elements of indigenous learning systems.

What is needed for successful development education, this paper concludes, is not necessarily more innovative educational models but rather a better understanding of traditional patterns of African education. A conceptual understanding of the past will reveal the seeds of successful nonformal education strategies for the future.

THE EFFECTS OF ENVIRONMENT EDUCATION AT A RECREATION DAY CAMP ON THE BEHAVIOR OF URBAN CHILDREN

Catherine L. Formwalt and Craig W. Colton[1]

Concern over deterioration of the natural environment is increasing, and measures are being taken by government agencies to slow or halt environmental damage. Schools with help from federal and state agencies, environmental groups and others are making students aware of natural environmental concepts and problems, including: natural resource interconnections, ecological processes, and social and economic factors affecting natural processes. Many working with these programs believe that individuals need sound ecology background to make intelligent environmental decisions for the future. Recently, Asche and Shore (1975) reported a study demonstrating that a group of children exposed to a formal school program of environmental education can demonstrate, in a natural setting, more conservational behavior than a control group.

Perhaps natural environmental experience and education offered within the less formalized settings of leisure or recreation programs could also affect attitudes and behaviors toward the natural environment. The recipients of these programs would not be restricted to students in elementary and secondary schools or even in colleges and universities. Persons of all ages could receive lifelong learning experiences offered with a variety of themes and approaches in many informal settings and at varied times.

To explore the impact of environmental education in a leisure or recreation setting, behaviors toward the natural environment by urban children at a summer recreation day camp were examined, and the effects of an eight-hour environmental education program at the camp were assessed. The camp, run by the Beltsville (Maryland) Recreation Department during Summer 1976, consisted of four two-week (ten-day) sessions for children from ages eight to twelve. During each session, eight one-hour environmental education programs were presented by a trained camp counselor to about half (40) of the children as supplements to the regular recreation programs. The other (49) children had only the regular recreation programs. The environmental education programs included the following areas and topics: (1) sensory awareness of the environment; (2) air, water, soil and light; (3) habitat; (4) energy flow, food chains and webs; (5) litter and recycling; (6) water and pollution; (7) erosion; (8) adaptation and seasonal changes. The programs were presented on the third through the tenth day of each session.

Eighteen natural environment related behaviors of the children in both groups observed during the first two days of each session and during the last two days of each session were recorded. Comparison between the first and last observations was made for each group. Also, results for the two groups were compared.

---

[1]The authors are Park Naturalist, Bowie, Maryland 20715; and Assistant Professor, Department of Recreation, University of Maryland, College Park, Maryland 20742, respectively.

For the group receiving the environmental education, there was a significant positive increase between the number of environmentally related behaviors exhibited during the first observation days and those exhibited during the last days. The mean score for the first days was 4.55 out of a total possible of 18, while the mean score for the last two days was 9.62, an increase of over 5. A similar change was not observed among the other group of children who did not receive the supplemental environmental education. The average score for these children showed a decrease from the first days to the last, going from 5.45 to 4.61.

Some behaviors appear to have been affected more by the program than others. With seven behaviors, there were no significant differences between the two groups during the first two days, but significant differences existed between the groups during the last two observation days. These behaviors were:

(1) offers to water plants in classroom (arts and crafts room);
(2) suggests the watering of plants (outside) during a dry spell;
(3) helps in ecology clean-up campaigns;
(4) suggests conservation projects;
(5) discusses conservation done or not done at home or in his community;
(6) states an "animal-man" relationship; and
(7) states a "soil-man" relationship.

Almost none of the children exhibited these behaviors during the first two days. However, from 25 to 57 percent of those who participated in the environmental education program exhibited the behaviors during the last two observation days, while there was almost no change among the recreation group.

Some behaviors increased more among the children receiving the natural environment experience than among the others. These behaviors included:

(1) discusses attitudes about the "wrongs" of pollution;
(2) makes and reports outdoor observations;
(3) states a "plant-man" relationship;
(4) states an enjoyment of the natural environment;
(5) does not scare or bother animals; and
(6) asks questions about nature.

In the first three, an increase of over 30 percent occurred among the environmental experience group with almost no increase among the other group.

This exploratory work indicates that environmental experience and education programs in a leisure and recreation setting could influence behaviors toward the natural environment. While the Beltsville program was specifically designed to make optimum use of particular facilities and staff at that Day Camp, other programs can be developed for use in summer camps, school camps, or state parks. Positive behavior related to the environment, like other behaviors, are perpetuated through repetition. Lifelong natural environmental experiences and education in settings of leisure and recreation could help provide these continued reinforcements.

Reference

Asche, Joseph, and Bruce M. Shore. 1975. Conservation Behavior as the Outcome of Environmental Education. Journal of Environmental Education. 6(4):25-33.

OF CALIPERS AND STEAMSHOVELS: THE CASE FOR THE USE OF IPSATIVE MEASURES IN APPLIED RESEARCH

Ned L. Gaylin[1]

Applied behavioral scientists and practitioners (i.e., those working with people in natural settings) are often placed in the bind of being forced to employ calipers to measure mountains. That is, the tools at our disposal (assessment devices and statistical techniques) are borrowed from the more basic disciplines--primarily the natural sciences. Not only does the use of such techniques often imply more information and knowledge than is actually available, the error introduced often leads to blatantly misleading conclusions, as for example in the Jensen I.Q. controversy (see Kamin, L. I., 1974).

The natural sciences, as well as some of the basic behavioral sciences rely almost entirely on absolute or normative measures. For the applied behavioral scientist dealing with attitudes and changes in behavior over time (or through the introduction of programatic variables like education or treatment) one of the most important and overlooked techniques is the use of ipsative measuring devices and techniques.[2]

The ipsative approach is concerned with individual differences (either interpersonal or intrapersonal) rather than with differences among large groups of individuals. While ipsative measures tell us little about an individual's relationship to large populations, these measures can ferret out relationships and changes over time for individuals and/or small groups: such as prior to and after educational programs. Furthermore, they are often relatively straightforward, simple to administer, and easy for the applied researcher and the lay public to understand. As well as being more relevant than normative measures in many applied situations, ipsative devices can also be fun to use and interpret, and therefore, can be employed as educative devices themselves, offering feedback to the participants in research.

While there are a number of instruments which employ ipsative methodology, one of the most unique, interesting, and useful is that originated by Stephenson (1957) called the Q-sort.[3] The sort is accomplished in two phases. The individual is given a number (usually from 50-100) of descriptive phrases which have been printed on small cards or "chips." Depending upon the application these might be phrases used to describe one's self, child, family, or a given educational program, etc. For explicatory purposes the concept of one's family will be employed here.

---

[1]Ned L. Gaylin, Professor, Department of Family and Community Development, College of Human Ecology, University of Maryland, College Park, Maryland 20742

[2]The term "ipsative" was created and delineated by Cattell (1944).

[3]Due to space limitations only Stephenson's Q-Sort technique is presented here: For delineation of Q-methodology, the reader is referred to Stephenson (1957).

The individual is first asked to order these "descriptors" from "most like" the way his family is, to "least like" the way his family is. This is accomplished by having him place the chips on a specially designed blank with spaces provided for each card. While not absolutely necessary, data handling is made easier when these spaces are arranged in a forced normal distribution. The individual is then asked to perform the same operation with an identical set of cards, but this time on the basis of how he thinks the ideal family should.

An index of association between the individual's actual perceptions and his ideal (referred to as the Actual/Ideal correlation coefficient) is then calculated from the two sorts. Thus, the individual's degree of satisfaction (or dissatisfaction) can be expressed in terms of a score, which in turn can be compared with the same score of others. In this way too, sorts from members of the same family can be compared and contrasted. For example, the ideal sorts of family members could be compared to measure their common aspirations, and in like manner so could the perceptions of the manner in which the family functioned be contrasted between parents and children. When the sort is employed in describing their children, parents are generally quite eager to see how their spouse's sorts and theirs compare, which often leads to interesting conversations.

Perhaps the best known application of this technique was that of Carl Rogers' (1951) comparison of self/ideal sorts before and after successful psychotherapy. Not only were significantly greater correlations observed following therapy, even more interesting was how this occurred: Increased correlation was discovered to be caused by a significant lowering of ideal sorts rather than a corresponding rise in self sorts. Similarly, in my own research, parents' increased satisfaction with their children's behavior following parent education programs tends to be the result of more realistic expectations, rather than perceived actual changes in childrens' behavior.

A comment on descriptor development: While sorts may be developed on the basis of the investigator's ideas, the most effective sorts tend to be developed by extracting descriptors from pilot interviewing with individuals who are representative of the population with which the sort will be employed.

In conclusion it might be well to note that while ipsative measures such as the Q-Sort technique may not be particularly effective in establishing what is "normal," they seem able to get at a more elusive and perhaps more important variable in people oriented research--satisfaction.

References:

Cattell, R. B. Description and Measurement of Personality, Yonkers, N. Y.: World Book Co., 1946.

Kamin, L. I. The Science and Politics of I.Q. Potomac, Maryland: Lawrence Erlbaum, 1974.

Rogers, C. R. Client Centered Therapy. Boston: Riverside Press, Houghton-Mifflin Co., 1951.

Stephenson, W. S. The Study of Behavior: Q Technique and its Methodology. Chicago: University of Chicago Press, 1953.

EDUCATION, EMPLOYMENT AND INCOME: THE FINANCIAL REWARDS OF GENERAL EDUCATION AND VOCATIONAL EDUCATION

Morton Gordon and Susan Quattrociocchi[1]

This paper examines recent research findings on the rate of return to education. The authors' intention is to determine whether there is a sound basis for assuming that enrollment by adults in vocational and technical courses and programs is more rewarding financially than enrollment in general education, particularly in general education curricula that lead to a degree.

Adults enroll in courses and programs for a variety of reasons. The percentage of adults that enroll for vocational and occupational reasons has not changed significantly in the past decade. What has changed is that adults are enrolling in courses and programs that are specifically vocational and technical, rather than in general education programs and/or programs that lead to a degree.

This trend is not surprising. The recent recession and consequent high rates of unemployment have been accompanied by attacks on "worthless" general education curricula and degrees.

However, research findings indicate that: (a) the rate of return to a degree has not changed significantly in the past decade. The answer to the question, "Does it still pay to go to college?" is yes, but not as handsomely as it did ten years ago. The paradox is, however, that even though the return to education is not as high as it was, a college education is more imperative for gaining entrance into high-paying jobs than it was ten years ago. Many of the authors reviewed have remarked that when larger numbers of better-educated persons are available, they are hired for the better-paying jobs first and those with less education are left unemployed longer and take lower-paying jobs (Jencks, 1976, and Thurow, 1975); (b) at the high school diploma level, though

---

[1] Morton Gordon, Professor of Adult and Continuing Education, School of Education, The University of Michigan, Ann Arbor, Michigan 48109; and, Susan M. Quattrociocchi, Department of Adult and Continuing Education, The University of Michigan, Ann Arbor, Michigan 48109.

not at the college degree level, the observed relationship between participation in adult education and income both depend on the prior development of particular attitudes and traits (Jencks, et. al., 1979); and that (c) education, e.g., a general education curriculum or degree, is still the best predictor of occupational status and earnings (Jencks, et. al., 1979).

In the light of these findings, the authors suggest a reexamination of some of the purposes and policies of vocational education and adult education with respect to meeting the needs of adults for stable employment and income.

After hearings on the relationship between education, technological change and employment, the Senate Subcommittee on Employment and Manpower concluded: "It would be a serious mistake to concentrate educational resources upon specialized occupational preparation at the high school level" (Lecht, L., 1974). Beyond high school, it is clear that adults who attend educational courses of a limited vocational affiliation, instead of completing a college degree, are foregoing the combination of factors (i.e., ascribed or acquired middle class backgrounds and a college certificate) that lead to higher-status jobs and higher incomes.

ADULT STUDENTS: WHAT ARE THEY SEARCHING FOR?

Theresa S. Harville[1]

Colleges across the country have experienced a growth in the number of older students enrolling in degree programs. Catonsville Community College's (CCC) enrollment is consistent with this trend. In 1972 students over 25 years old were 26% of the student body; in 1978, they were 43%.

This study of this new population explores one area, that of goals, in depth through personal interviews. A goal inventory (Florida, 1976) was used to categorize goals into: Career, Academic, Personal, Social, Cultural and Community.

Initially, all goals involved were explored. Further discussion centered on discriminating among goals by having students identify primary and secondary goals and to add perspective to long term goals. Demographic data was obtained for the purpose of comparing the three age groups and males and females. The precipitating factors in their decision to enroll and their needs as new students were also discussed.

The students interviewed were randomly selected from those new to college, in Fall '77 who were in the 26-55 age range using college statistical age reporting format: 26-30, 31-40 and 41-55. The sample included men and women, full-time and part-time students. Total number interviewed was 95 representing 36% of N.

The Students

Most of the students surveyed were married (76%) with more men married than women and had children (85% and 88%), most of them having small families (two or less). Most of the males were Heads of Households, however, there was a significant proportion of females in the 26-30 and 31-40 who were also Heads - 36% and 39%.

Almost all of the males were employed full-time. Half of the women worked full-time in all age groups, and a small percent part-time (9 to 14%). A sizeable group of women were not employed and not looking but rather preparing for work (27%, 39% and 23%). Business and manufacturing employed most students. Average income was in the $11,000-20,000 range.

---

[1]Theresa S. Harville, Associate Professor and Counselor, Catonsville Community College, Catonsville, Maryland 21228.

Goals

For all students, the primary reasons for returning are: 1) to take courses to receive a promotion, 2) meet employment requirements of a specific job, 3) earn an A.A. degree, 4) change occupations and 5) broaden knowledge. Of the first ranked item, receiving a promotion, twice as many men chose that item as women, with it being more predominant in the 31-40 age group.

When goals were analyzed by sex and age group, there were interesting variations. Men and women were most similar in the 26-30 age group with both clustering around career (49% and 36%) and personal goals (42% and 54%). Men became more career directed in the 30-55 age groups (76% and 88%) while women peak in career goals in the 31-40 age group (65%). Women in the 40's became more interested in personal goals again (39%) although career goals are highest (52%). The majority of students are in the General Studies curriculum which on the surface would not reflect the high career orientation.

The specific primary goals of women were: 1) Change occupations, 2) Meet employment requirements of a specific job and 3) Receive a promotion. The women were primarily in entry-level jobs and were seeking a way out of them into something more demanding and satisfying.

The men in the sample who also enrolled primarily for career reasons were more advanced along job lines and were concerned with: 1) Receiving a promotion, 2) Earning a A.A. degree and 3) Meeting requirments of a specific job.

With the inclusion of the "Other" categories a new goal "Broaden my knowledge" became the fourth ranking item. There was a pattern for women of having a diversity of goals spread through different categories while men tended to narrow their goals with age.

In identifying secondary goals, women reflected a Personal orientation while men continued to direct their goals in the direction of Career with one Personal goal in common: developing self-worth. A comparison of the primary and secondary goals of married versus unmarried (single, divorced and widowed) women was made. There was no substantial differences with the exception that Personal goals were more prominent in the Secondary goals of the unmarried group.

In summary, the major importance of Career goals emerges for both men and women. At the same time, the results point to the fact that students are returning hoping to satisfy a wide variety of goals and that their expectations are high as they enter.

Long Range Goals

For all students there is a significant orientation to Career goals for the long term in the form of a "better" job - one that pays more, has more prestige and more satisfactions as they defined it and also to jobs in management.

Reference

Florida Community Colleges Research Committee. Student Goals Catalog and Handbook for Utilization (mimeographed). 1975.

A SURVEY OF ADULT VOLUNTEERS WHO WORK WITH LOW INCOME YOUTH IN 4-H PROGRAMS

Anne L. Heinsohn[1]

Robert B. Lewis

During the spring of 1978, 590 volunteer 4-H leaders were surveyed. The sample was composed of volunteers who were 18 years of age or older who worked with low income youth in 4-H programs. Extension agents in 41 counties in eight states located in each of the four national extension regions selected the respondents. The cooperating extension agents were asked to use subjective criteria in the selection process since Human Subjects Protection rules prevented their asking income status and such items could not be included in the survey instrument. These criteria included place of residence, employment status, and other information known to the agent, but not sought from the respondents.

The respondents ranged in age from 18 years to over 60 years with close to one third being 30 to 39 years of age. Of the surveyed 4-H leaders 47 percent were black, 40 percent white while the remainder described themselves as Puerto Rican, Mexican, Native American and other. Females made up 85 percent of the sample and males 15 percent. As would be expected more than half of the respondents were married (58 percent), 19 percent were single, 10 percent divorced with the rest indicating their marital status as separated or widowed. While 82 percent of the respondents indicated they had from one to 6 or more children, 18 percent or 111 respondents had no children, 26 percent of the married volunteers had no children. One fourth of the sample reside in large cities, 11 percent in suburbs of cities and 25 percent in small towns with the remainder indicating rural residence. Slightly more than half of the respondents (52 percent) are employed. Close to a quarter of the sample described their jobs as skilled.

The volunteers were asked to complete a pencil and paper survey instrument containing a variety of items dealing with recruitment methods and motivation for becoming a 4-H leader. "I like kids" was mentioned frequently (69 percent) in response to the question "Why did you become a volunteer for 4-H?" More than one third of the sample became 4-H leaders because they had a child in 4-H and 26 percent indicated that "working with kids keeps me young". While liking kids was the most frequently cited reason for becoming a 4-H volunteer, respondents citing this reason were more likely to be single or separated as opposed to being married. Among those respondents who were married, divorced, separated or widowed (40 percent of the sample), having a child in the group remains a

---

[1]Anne L. Heinsohn, Assistant Professor of Extension Education, 110 Armsby, Pennsylvania State University, University Park, PA 16802.

Robert B. Lewis, Associate Professor of Agricultural Education, 405 Agricultural Administration, Pennsylvania State University, University Park, PA 16802.

major factor in moving adults into 4-H volunteer leadership roles. The second most frequently cited response among the single volunteers was "a place to use my skills."

Approximately half of the surveyed volunteers were recruited by extension staff members and this held regardless of marital status. Married persons were more likely than others to volunteer on their own, with single persons least likely to do so. Single persons, however, were somewhat more likely than others to respond to a request from a current 4-H club leader.

All but 10 percent of the respondents indicated they had received some training for their volunteer role, which was most frequently cited as "teaching subject matter to youth on a regular basis". The training was usually provided in a one to one situation by a staff member in the volunteer's home. Of the surveyed volunteers, 59 percent indicated they had attended group meetings of 4-H leaders which were conducted by extension staff. These meetings were more often then not held in the extension office.

In general, the surveyed volunteers felt they were prepared to carry out their volunteer roles. Those who indicated they had received a lot of training were more likely to perceive themselves as "very prepared". There appears to be a direct relationship between a positive perception of the amount of training received and a positive perception of degree of preparedness. Only 11 percent of the total sample received no training at all.

In addition, a positive relationship appears between perception of preparedness for volunteer role and satisfaction in volunteer role. Those volunteers who indicated they were very prepared were more likely to report high satisfaction with their role. Of the very prepared volunteers, 35 percent were very satisfied while 19 percent of the slightly prepared volunteers reported they were very satisfied.

It should be noted that more than half of the sample (58 percent) have been 4-H volunteers for two years or more. Those that have been 4-H volunteers for four to six years are more likely to indicate that they have received "a lot of training". This is not unexpected given their tenure as a volunteer. Therefore given a period of years, the data indicates that repeated training leads to a perception of being very prepared and this in turn leads to increased satisfaction on the part of the volunteer. Time, and the experiences the volunteer has during a several year span, would seem to be critical for volunteer tenure/satisfaction.

It is interesting to note that among former volunteers in the sample, dissatisfaction was not mentioned as a factor in their leaving 4-H. The factor cited most frequently was increased family responsibilities.

Further analysis of the data is underway together with data from county and state 4-H staff. It may be that extension agents engaged in expanding the 4-H program to reach low-income youth can seek volunteers beyond the parents of youth intended to be reached, to other persons in the community including young marrieds with no children and single persons. These data also indicate that employed persons do volunteer and in this case many of the volunteers were employed women. While parents of 4-H members remain a prime source of volunteers, this source can be supplemented by other segments of the population.

The authors gratefully acknowledge the assistance of Anne Camasso.

OPPOSITION TO THE THEORY AND PRACTICE OF LIFE-LONG LEARNING

Daniel P. Huden[1]

Opposition to life-long learning has grown. It seems to reflect solar perspectives of our rather divergent points of view. Proponents and opponents of these four points of view all find life-long learning objectionable.

Two forms of Neo-social Darwinism are discernible. One version harks back to the "root hog, or die" thinking of the turn of the century, and opposes life-long learning as unwarranted interference with the normal working out of evolution. The other version places organized life-long learning in the realm of dysfunctional, anti-survival adaptation to present, or even past, narrow niches, and rejects it as inadvertently harmful to man.

A second viewpoint from which two sub-schools of opposition to life-long learning derive is social reproduction theory. The gist of this theory is that society reproduces itself in detail, so that over time there is a marked tendency for social classes, institutions, and other structural features to recur, with only minor adjustments to what appear to be major social changes. From this perspective, life-long learning, and especially the version of it promoted by the French law of 197 , is designed to inhibit needed social change and improve the reproductive capacity of existing society. Rather than benefiting the people who gain access to life-long learning, it is held that these programs merely tie people more tightly to the economic and social features which presently determine their ways of life. A more conservative version of social reproduction theory sees in life-long learning a threat to the status quo, and hence opposes it.

A third stance of opposition to life-long learning is dialectical materialism, or Marxism. The main objection to life-long learning from the Marxist point of view is similar to that of the more liberalizing social reproductionists. It is held that most projects for life-long learning are too narrow and too vocational, and that they tend to increase the workers ties to firms, dilute proletarian consciousness, submerge humanizing goals beneath vocationalizing goals, and create conflict situations in which

---

1 Daniel P. Huden, Associate Professor, University of Maryland College of Education, College Park, Maryland.

excellence in life-long learning corresponds to neglect of work, and excellence at work demands the narrowest sort of careerism. A variant admits the value of life-long learning, but interprets the provision of such programs as a part of an effort to keep people contented in their places.

There are sources of opposition to life-long learning which seem to be more independent. John Seeley warned of the crippling impact of excessive instruction for adults. Targeting parent education, he felt parents were being intimidated by supposed experts who knew very little about child rearing. Seeley must be viewed as a social liberal. Phillip Rieff mounts a trenchant attack on the idea that people are in need of special instruction and counseling to help them overcome their problems and ills. Rieff holds for the traditional and religious values, the decalogue, careful attention to texts in teaching, interdicts rather than impulse release, scholarship rather than grantsmanship.

Traditional religion, and religious leaders, in various countries have been powerful spokesman against life-long learning controlled by anyone but the religion itself. Examples of this are widespread. These sources seem disparate, but have a common root. The vision of what it is to be cultured is very different, as between Seeley and Rieff, and the leaders of various anti-intellectual religious formations. But what all are for is an assumed ideal of cultural excellence, stressing independence for Seeley, depth of scholarship and asceticism for Rieff, and various versions of strict adherence to creed for the religious leaders. Seeley sees in the life-long learning efforts he studied an attempt to cripple through dependence on experts; Rieff sees life-long learning as it takes shape in the United States as the triumph of the therapeutic, the attempt to persuade each person that he or she is in need of cure if he or she exhibits any signs of restraint, sadness, remorse or other difference. The local religious leaders take more specific exception to any departure in detail from prescribed doctrine.

Life-long learning is opposed for structural reasons and in defence of professional turf. Opposition to this potentially superior alternative to regular public schooling is frequent. There are clear instances of political objection to life-long learning, usually from the doctrinaire left or right.

Examples of each of these forms of resistance are given. A stance which may be useful to those facing such opposition is described.

TWO USES OF LIFE-LONG LEARNING IN THE DISASTER ASSISTANCE FIELD

Gudrun Hartig Huden[1]

Being prepared means having some knowledge of the history of events that led up to that point, knowing the present situation, and being able to make projections about the likelihood of deterioration or improvement in the future. As a departure from the strictly relief-oriented aspects of U.S. disaster assistance, current policy places emphasis on preparedness, including encouraging ground data development together with application of remote sensing technology. The development of simple and continuous ground data gathering systems is imperative for the successful employment of remote systems, because only in conjunction can they become effective, reliable, predictive systems. Very few of the countries most vulnerable to disasters of large magnitude currently have good base-line data and technicians to set up and maintain such reporting systems. There is increasing awareness in the governments of some less developed countries, particularly those who belong to the group of food deficit countries or those who are struggling to become self-sufficient, that without the basic tools in the form of performance yardsticks made up of a dozen or so vital indicators of change, they have little control and much to be fatalistic about. The promises inherent in the remote sensing data from satellites generally do not add to the feeling of being in control, yet this could change if the country were in a position to confirm, detail, and correct the estimates coming from the interpretation of the satellite images. Few of these countries are in a position to devote any appreciable sums to a formal western data collection system. Yet there is a wealth of untapped human resources in the indigenous people who could become a part of a system that measures the pulse of the food supply system which can be likened to a pipeline carrying food to the householders. Food supply monitoring measures flow and quality at specified points along the pipeline. Analyzing food supply is a continuous assessment of how many people have how much food. In the Sahel--an area always living on the brink of disaster--there is an opportunity to encourage regular reporting of conditions through the willing cooperation of the government and a number of regular contacts with the local population. It is assumed that the potential carriers of the message are already there in line of their other duties. Perhaps bolstered by a small incentive system, they will learn a dual function. Much can be learned from livestock behavior about existing or oncoming drought: nomad herders have for centuries been aware that their cattle know where and when to move. Tapping into this and other collective knowledge built up over centuries in the oral tradition and

---

[1]Gudrun Hartig Huden, Program Analyst, Office of U.S. Foreign Disaster Assistance, Agency for International development, Department of State, State, Washington, DC 20523.

wisdom of one group peculiarly adapted to the fragile ecosystem of semi-arid regions can be seen as making learners teachers as well as improving predictive ability. If the notion that every plant is an indicator of the condition of the soil can be taught as a matter of course on different levels of the educational system, schools (however humble) could become excellent reporting and collecting stations on the sub-regional level through an established system of weekly observations, involving teachers, students and their families as a living laboratory. Sponsored as a national awareness program by ministries of education and the like, this could be technically assisted by Peace Crops personnel, PL-480 food monitors who travel to areas of the country periodically, locally operating U.S. and other voluntary agencies (CARE, CRS, SAWS and others). This does involve some commitment to a modest investment in reeducation and training of government employees and key informants to the system. The important factor in the information flow--from the field to a central point and back to the field again--is that it should include all the people who need it. This is life-saving, life-long learning, engaging all status levels and age-grades.

A more inner-directed learning effort is the Lessons Learned System the Office of U.S. Foreign Disaster Assistance is developing. A tool for management decisions, it alerts to consistent performance failures in donor assistance in the past which must, therefore, be expected in the future; and it identifies those areas where consistent successes have occurred. The system enables recording and displaying of old and new lessons and evaluating old ones in view of more recent experiences and new policies. Five elements describe the potential lesson to be learned: disaster context; activity undertaken or resource utilized; performance evaluation; cause or reason why x performed poorly or well; and a recommendation for enhancing or avoiding certain solutions. If the record of the past is consulted before embarking on a new and similar action, and the earlier recommendation is considered and acted upon, then the subsequent evaluation should reflect the impact of the first recommendation in a process of continual re-evaluation. Immediate learning, improvements in policy formulation are expected benefits. Foreseen is a revolving set of actions where experience analyzed leads to learning, leads to useful reports to policymakers, leads to improved policies, leads to improved response to disasters and a new round of experiences, analyses, reports and policy adjustments. Whether the system is a realistic approach to a collective memory of the lessons of the past will rest in large measure on the ability of the evaluator to remain objective. This can be viewed as a microcosm of a learning society. As we know, objectivity is a learned, ordered, rule oriented attainment, itself an outcome of, as well as contibutor to, the process of life-long learning. The more societies seek out and enhance areas of problem-solving potential, the nearer mankind will be to maximizing present evolutionary potential.

REMINISCENCE: A NONFORMAL EDUCATIONAL TECHNIQUE FOR THE AGED

George A. Hughston[1]

This study was conducted to investigate whether a short-term nonformal educational program has the potential for raising the cognitive abilities of older people. A group of persons using self administered new material, another using self administered reminiscence material and a control group were pretested on the Raven Standard Progressive Matrices. The new material educational technique presented learning problems of various kinds to the subjects, who did the specified operations. The reminiscence approach required the subjects to bring from memory all the elements upon which the operations were to be performed. A total of 83 elderly volunteer residents of three apartment complexes for the aged served as subjects, with approximately equal numbers in each group.

It was hypothesized that there would be significant differences in gain scores between the intervention group and that there would be significantly greater increases in scores for the reminiscence group than for the group using new material. It was further hypothesized that contributions of sex and years of education would not contribute significantly to the variance. The training materials were presented in four weekly packets to be worked on by the individuals at their leisure for a period of about fifteen minutes daily. All persons were visited in a friendly way at drop-off and pick-up; the control group was also visited at the same intervals. Raven scores were obtained at posttest.

The data were analyzed by analysis of variance and by analysis of covariance using the pretest as the covariant; t-tests were made of differences between gain scores of the three groups. The analyses showed that method and method by sex were significantly contributary to the variance. Women increased their Raven scores very significantly by the reminiscence method, while men gained more from the method using new material. There were no significant differences, however, between gain scores for either sex or for the combined sexes. Neither sex nor years of education contributed significantly to the variance.

This study gives evidence that persons are interested in their own cognitive functioning and are self-motivated to undertake nonformal experiences they believe will benefit them. The simple tasks undertaken gave modest, at least temporary, gains which could not be accounted for by test practice.

---

[1]George A. Hughston, Assistant Professor, Department of Management, Housing and Family Development, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061.

PARTICIPATORY EVALUATION IN NONFORMAL EDUCATION

David C. Kinsey[1]

The paper begins with a discussion of the need for a richer variety of approaches to formative evaluation that are suitable for use by practitioners in nonformal education programs and take into account the particular sensitivities and constraints in such settings. In programs that are characterized by overworked personnel and limited resources, by informal and short-term learning programs, and by voluntary, task oriented learners, many traditional evaluation procedures are not appropriate. Methods must be adapted so as to avoid disruption and threat, to be useable by program personnel and clientele, and to provide useful results with minimal delay.[2]

Participatory evaluation may represent an important dimension in such adapted approaches to formative evaluation. The rationale for using some mode or degree of participation is viewed in reference to its practical, pedagogical, programmatic and political functions. In theory, participating parties can range from programmers and staff to learners and community members. The degree of their participation may vary from simple reactions and feedback to active roles in evaluation planning, implementation or analysis. Further, participants may deal with one or more of the different aspects of the program - its context, inputs, process or product - and may do so at one of more points in the time sequence of program development.

In practice, the potential for effective use of participatory evaluation in nonformal education is impeded by a tendency to polarize the options. On one hand participation in evaluation, if not neglected altogether, is typically limited to using selected participants as informants. This may be due to not seeing how more participation is either desirable or feasible. On the other hand, enthusiasts occasionally urge comprehensive participation and their evaluation plans exceed the capacity and tolerance of the system and people involved. Hence the need for attention given to considerations and methodological options for simple or middle level mixes of participatory evaluation.

A major section of the paper is devoted to considerations that may help one to decide whether to stress participation, and to find the level, moments, degree and populations where this can be most beneficial and feasible. Three sets of qualifying conditions that merit consideration in making these decisions are proposed. A) Objectives of participation. The identification, on a suggested spectrum of possible purposes for promoting participation, of which objective is to be emphasized will help determine where and how participatory efforts are best to be focused. B) Limits on participation. A consideration of the categories of possible constraints on effective participation will assist a filtering out or modification of plans so as to increase the feasibility of what is attempted. C) Methods of evaluation. The evaluation method to be

---

[1]David C. Kinsey, Associate Professor, Nonformal and International Education, Center for International Education, School of Education, Hills South, University of Massachusetts, Amherst, Massachusetts 01003.

used, from a list of options that range from soft and low demand methods to harder, higher demand methods, will have a direct bearing on what kind of participation will be useful and practical.

To put these conditions into a framework that will help one make judgements about the optimal focus for participatory efforts, a three dimensional reference grid is outlined. The dimensions and their respective components are as follows. I) Content of Evaluation: Context - Input - Process - Product. II) Phases of Evaluation: Planning - Implementation - Analysis - Action. III) Participants in Evaluation: Programmers - Staff - Learners - Community. Choices about the mix of components to emphasize in a given participatory activity will be influenced by a concurrent, or alternating, reference to qualifying conditions A-B-C. If, for example, an important objective of encouraging participation (A) is to sensitize staff about learner reactions to teaching methods, it might initially be decided to have staff and learners (III) focus on process (I) and deal with all phases of the evaluation (II). Reference to the nature and degree of limits on participation (B) by these groups in this particular program setting might indicate that learners could most feasibly participate on the implementation and analysis phases. The evaluation method (C) to be used would then have to be suitable for these groups as well as for the purpose. This process can help indicate where either participation variables, or purpose-method decisions, may have to be adjusted to make the fit workable. It may also serve to suggest if and at what points the aid of an outside specialist in evaluation should be sought.

The final section of the paper deals with the nature of existing evaluation methods in the literature that provide for elements of participation, and how this irregular body of options can be enriched. The most common variety of existing participatory methods deal with learner reactions and self-assessment, though examples are also cited on staff or citizen assessment of the achievement of program objectives, participatory assessment of a complete system, etc. Gaps and needs are noted.

Two approaches are suggested as being useful for developing options for participatory evaluation in nonformal education. One involves the selection of promising participatory models from the evaluation literature or from other fields (e.g., problem-solving methods, social work literature), adapting them to the evaluation needs and program constraints of a nonformal education setting, field testing the adapted methods and revising them. The other is to identify modes of participation already operating in a program setting, experimentally add evaluative activities and components on an incremental basis, and select the most promising for revision and further development. Examples are given of adapted participatory methods that have resulted from each approach as we have used them in connection with field programs of the University of Massachusetts. The paper concludes with an identification of needs for further research and development on participatory evaluation in nonformal education.

---

[2]David C. Kinsey, Evaluation in Nonformal Education: The Need for Practitioner Evaluation. Issues in Nonformal Education #3, Center for International Education, University of Massachusetts, 1978.

A MODEL INSTRUCTIONAL DESIGN FOR COMMUNITY RE-ENTRY OF INSTITUTIONALIZED ADULTS

Hilda Koehnlein, M.Ed.[1]

Abstract For An Adult Education Act Special Project

The Adult Education Program at Crownsville Hospital Center, a multi-purpose Maryland state facility, was awarded a federal grant to develop, implement, and evaluate a model instructional design for the community re-entry of institutionalized adults. The project began in December, 1976 and lasted until June 30, 1977.

The 38 students enrolled in the program were described as economically and educationally impoverished with additional problems that included physical handicaps, emotional handicaps, family problems, deliquency and/or multi-learning disabilities. Class size was held to an enrollment of 16 at any one time, with an average daily attendance of nine.

The instructional design which resulted from this Pilot Project was a Guide entitled, "Community Re-Entry". The guide was intended to be used by educators familiar with the affective domain, a distinctive feature and objective in this instructional process. Effective use of the affective emphasis required availability of counselling or advisory services for each staff member.

Standardized achievement tests, the Adult Performance Level Survey (APL), and pre and post tests for each lesson were used as measuring instruments. Comparison between the pre and post tests showed surprising growth on short term recall. However, the APL did not prove to be a reliable instrument for determining community readiness. Patients' target problems were more specifically identified in the Community Re-Entry Guide prepared for this pilot project and, generally, not included as test items on the APL.

The short stay in the institution coupled with the high rate of recidivism indicated a strong need for the guide to be used in community resources as well as in the state hospitals. Moreover, diagnosis and treatment performed within the hospital facility should be useful and therefore forwarded to similar community educational programs in order to provide meaningful patient aftercare and continuing educational services for the discharged client.

---

[1]Coordinator, Adult Education, Crownsville Hospital Center, Crownsville, Maryland 21032.

This kind of planning for the future will probably necessitate collaboration between the State Department of Education and the State Department of Health and Mental Hygiene. Such a joint effort could facilitate a second pilot project for operation within a community mental health facility. It is also recommended that a source of qualified people to implement the design elsewhere be provided by identifying specific professional course work for people with various backgrounds to prepare themselves as Educational Counselors in the mental health field. A final recommendation as a follow-up of this project would be the development of an APL form appropriate to the more immediate needs of the institutionalized population.

ABSTRACT REMOVED

PAPER NOT PRESENTED

THE BUSINESS OF BUSINESS EDUCATION: A SMALL BUSINESS ENTREPRENEUR PROGRAM

Rex L. LaMore and Tyler S. Newton[1]

The necessity for a comprehensive and adequate educational program for small business entrepreneurs is critical. In 1974, Dun and Bradstreet found that 59.9% of all new businesses fail within the first five years of operation.[2]

The Federal Reserve Bank of Boston in their Business Planning Guide written by David H. Bangs, Jr., and William R. Osgood, 1976, state that over 90% fail within the first ten years. [3]

A 1976 Dun and Bradstreet survey of 9,623 businesses revealed that management incompetence is the greatest underlying cause for these business failures in every business and category, manufacturer, wholesalers, retailers, construction and commercial sales.

Small business owners need new education and training programs which are specific to small business problems.[4]

This data along with the rising concern for the erosion of the economic base in our urban communities leads one to conclude that there is a significant need for small business education in our communities.

The Center for Urban Affairs in the College of Urban Development at Michigan State University along with the Greater Lansing Urban League has recognized this serious lack of educational opportunities for small business entrepreneurs. Together we have developed, through a series of pilot demonstration programs, an innovative and effective educational series to address the specific needs of small business people in the greater Lansing community.

Through the utilization of an advisory committee composed of local business people, university faculty and students, state and local agencies, financial institutions and concerned citizens, a variety of community resources were pulled together to focus on the key aspects and necessary information required for the development of a successful small business.

---

[1]Rex L. LaMore, Coordinator and Specialist for Community Development Programs, and Tyler S. Newton, Program Assistant for Community Development Programs, Center for Urban Affairs, College of Urban Development, Michigan State University, East Lansing, Michigan 48824.

[2]Dun and Bradstreet, Business Failure Record, 1974, New York, New York.

[3]Bangs, David H., and Osgood, William R., Business Planning Guide, Federal Reserve Bank of Boston, Urban Affairs Section, Massachusetts, 1976, p. 1.

[4]The CADA Corporation, A Paper on The Future Potentials for Small Business, for the Senate Select Committee on Small Business, Annapolis, Maryland, November, 1978.

These planning efforts resulted in the implementation of two educational series targeted for two different populations, i.e., those not now in business and those in an existing business who desired further information on how to improve or expand their business opportunities.

Since the Initiating A Small Business program which was offered in the Fall of 1977 and the Maintaining a Small Business series which was offered in the Spring of 1978, 59 participants received nationally recognized Continuing Education Units from Michigan State University for successfully completing the course.

In the Summer of 1978, a mailed follow-up evaluation was conducted of these 59 participants, (some of which were couples) to assess the impact of this program on their business decisions. A 62.5% response rate was realized in this evaluation.

The initial analysis of the data has shown that of those who responded, 33.3% started a new, or expanded an existing business since attending their respective program. An overwhelming 88.9% of these respondents agreed the small business educational program benefited their business. This compares to 96.7% of all respondents who agreed the program made them more knowledgeable about starting or expanding a business.

Additional information was gained in this evaluation regarding the financing aspects of starting or expanding a business. Personal savings and conventional loans were most frequently used as a source of capital, 55% for those respondents who started or expanded a business used this type of financing. The remainder used the Small Business Administration guaranteed loans or other sources.

In regards to management skills which is a significant reason for business failures 60% of the respondents initiated new bookkeeping measures as a result of participating in the program.

The analysis contained here is still preliminary and further longitudinal evaluation needs to be conducted. It appears that the educational series offered through the efforts of a broad community based advisory committee with the assistance of the Center for Urban Affairs at Michigan State University and the Greater Lansing Urban League is having a significant impact on the development of sound small businesses in the greater Lansing community. Similar programs can easily be duplicated in other communities thus facilitating the development of a strong economic base for small businesses throughout the nation. Now more than ever in our fluctuating economy, stable business development is essential to the healthy growth of our communities.

BIBLIOGRAPHY

Bangs, David H., and Osgood, William R., Business Planning Guide, Federal Reserve Bank of Boston, Urban Affairs Section, Massachusetts, 1976, p. 1.

Dun and Bradstreet, Business Failure Record, 1974, New York, New York.

The CADA Corporation, A Paper on The Future Potential for Small Business, for the Senate Select Committee on Small Business, Annapolis, Maryland, November, 1978.

FACTORS AFFECTING PARTICIPATION OF OVER-SIXTY ADULTS IN NONFORMAL ADULT EDUCATION PROGRAMS

Penny Love and Betty Seidel[1]

Introduction

With the increased focus on providing educational opportunity for adults, a primary concern is motivating over-sixty adults to participate. It has become evident that, despite the tuition-free educational programs that may be provided, a very small percentage of over-sixty adults engage in these activities. In view of the educational community's commitment to the concept of "lifelong learning," this study was designed to explore those factors affecting participation of over sixty adults in nonformal education programs and to make an assessment of the significance of these factors. One program that has been highly successful in attracting participation by over-sixty adults is the Title VII Nutrition Project for the Elderly, "Eating Together in Baltimore." This research explores factors that would influence the over-sixty adults who attend the nutrition project to participate in nonformal education courses, and develops information useful in structuring a model for such educational programs.

Methodology

In the development of a methodology for the collection of data, provision had to be made for the variance of background in the participants. Two assessment techniques were employed. First, a survey instrument was developed to examine, in a non-threatening and anonymous atmosphere, some of the factors that would affect enrollment in and completion of nonformal education programs by over-sixty adults. Second, an in-depth group discussion was arranged with the participants, and that information deparately documented. The sample included over two hundred urban, over-sixty adults of both sexes, of various ethnic groups, of five different "nutrition sites," and of a wide range of educational backgrounds.

---

[1]Penny Love, Counselor-educator, 105 Whitehead Hall, Johns Hopkins University, Baltimore, Maryland 21218.

Betty Seidel, Coordinator of Supportive Services, Baltimore City Health Department, 620 North Caroline Street, Baltimore, Maryland 21205.

Results

The information was programmed into two general areas: the first five factors were planned to deliniate personal and attitudinal perceptions, and the remaining seven questions addressed factors that could be motivational in participation in educational courses. The tabulated personal and attitudinal data classified the participants as follows: 95% "felt great to average"; 84% viewed themselves to be "as smart or much smarter than younger people"; 96% considered themselves "very to average attractive"; 76% knew that over-sixty adults could take free college courses. Data relative to motivational factors for participation in courses indicated the following results: 77% would be most comfortable taking courses at "nutrition" sites. 12% at another place in the neighborhood, and 9% at the college; 59% found "food" as part of the educational program very important; 28% indicated they would attend courses if given free transportation to the school, 37% would go in the neighborhood; 83% would take certain subjects only. The ranking of those factors most important in the decision to take a course was: first, what you would be learning; second, whether the teacher was interesting; third, convenience of location; fourth, the time of day; fifth, whether food would be served with the course; and sixth, if the school would give a certificate. Responses to the final two questions were influenced by the fact that 55% of the respondents had been involved in taking non-credit courses in personal adjustment and productive living given by local community colleges at the nutrition sites: 53% indicated having taken a college course and 47% had not. Factors that made a course worthwhile: what you have learned; having an interesting teacher; the people you meet and having fun. In the discussions, a need to participate in activity that increases feelings of self-worth and continuing productivity was identified as of primary concern. The fears of failure in any educational undertaking were emphasized. Subjects for future study were: basic reading, writing and arithmetic; psychology; health education; communication skills; economics and political science; and cultural arts.

Conclusions

On the basis of the statistical and informational data in the research, the following can be extrapolated for the development of nonformal education courses for over-sixty adults: content should address needs as perceived by the participants; the instructor should be interesting, sensitized and attuned to address these needs; careful consideration must be given to: student preferences for the time of day, the convenience of the location of the course, and the importance of including food service as part of the course. Some written certificate of completion should be awarded. If the research data generated by this study is incorporated in the design of nonformal education programs, over-sixty adults will be motivated to participate.

A STUDY OF BLACKS IN GLENARDEN AND THEIR ATTITUDES TOWARD VOLUNTEERISM

Viola F. Mason and Gene C. Whaples[1]

This study was designed to obtain a broader understanding of black residents of all economic levels and their attitudes toward volunteering. It was hypothesized that black residents of a multi-socioeconomic residential area would reveal strong positive attitudes towards volunteerism. It was sub-hypothesized that: (1) blacks volunteer primarily in church groups; (2) athletic groups are the second most served by volunteers; (3) females are likely to volunteer more frequently than males; (4) age is associated with frequency of volunteer work and (5) health is associated with frequency of volunteer work.

To obtain data for the study, a random sample of 1975 residents was selected from Glenarden, Maryland. Glenarden is a predominantly black community in Prince George's county, Maryland with a population of 4,502. The household base population is 99% black. (The research tool was personal interviews using an interview schedule.) In the first part of the schedule residents were asked to answer questions regarding their volunteer activities for the past twelve months. The second part of the questionnaire referred to feelings and self concepts of the residents and utilized Rosenburg Self-Esteem Scale.

Data were analyzed using the Statistical Package for Social Sciences. The Descriptive Statistics Sub-Program in particular was used.

The findings of the study supported the hypothesis that the attitudes of blacks in multi-socioeconomic residential areas reveal strong positive attitudes towards volunteerism.

Attitudes were significant in the following comparison:

1. Blacks volunteer primarily in church groups.
2. Athletic groups are the second primary groups of volunteerism.
3. Females are likely to volunteer more frequently than do males.

---

[1]Viola F. Mason, Cooperative Extension Service Agent, 4-H and Youth, 15209 Marlboro Pike, Upper Marlboro, Maryland 20742 and Gene C. Whaples, Associate Professor, Extension and Continuing Education, University of Maryland, College Park, Maryland 20742.

4. Age is associated with frequency of volunteer work.
5. Health is associated with frequency of volunteer work.

Data did not support sub-hypothesis that athletic groups are the second most popular area for volunteer work.

Chi square analysis was run on the variables of age, income, health and sex. There was no significant relationship, except with the variables of sex, volunteerism and sports.

FULL-TIME FACULTY MEMBERS' PERCEPTIONS OF AND INVOLVEMENT IN COMMUNITY SERVICES AT SELECTED COMMUNITY COLLEGES

Dennis F. Michaels[1]

This study investigated the nature of full-time faculty members' perceptions of and involvement in community services at selected community colleges in Ohio. Community services was subdivided into five components concerning administration, quality of instruction, programs, purposes, and students. Involvement by faculty in community services was divided into four components of: planning community services; teaching community services; number of community services activities taught; and method of compensation for teaching community services activities. A secondary purpose was to provide demographic information about full-time faculty members.

The following variables were used to test null hypotheses concerning full-time faculty members' perceptions of and involvement in community services: sex; planning involvement in community services; teaching involvement in community services; chronological age; previous employment level; number of years employed at a community college; preferred educational level for employment; academic rank; subject matter area; highest degree held; number of community services activities taught; and method of compensation for teaching community services.

A random sample of 300 was drawn from a population of 841 full-time faculty from six of the seven locally supported community colleges in Ohio. A Likert-type scale of 35 statements was used to measure the respondents' perceptions of and involvement in community services. The survey was reviewed by a jury of educators and was field tested by 10 randomly selected full-time community college faculty members. Five mailings and one on site visitation accounted for a return rate of 83.0 percent. The data from the respondents' surveys were transferred to IBM keypunch cards. The data were analyzed utilizing the computer program, Statistical Package for the Social Sciences.

The data were analyzed by either the t test or the analysis of variance. If the Anova resulted in a statistically significant difference, then Scheffe's post hoc analysis was employed to isolate the presence, nauture and extent of the difference. The alpha level chosen for rejection of each hypothesis was the .05 level of significance. Demographic data were described and discussed through frequency distributions, measures of central tendency and crosstabulation procedures. The subjective comments of the Optional Question were grouped into categories and any noticeable trends were discussed.

Inferential Data

Among the major findings of this study were:

---

[1]Dennis F. Michaels, Recent Ph.D. Graduate in Adult Education From The Ohio State University, 1715 Emerald Drive, Lorain, Ohio 44053

Female full-time faculty had more favorable perceptions of community services programs than male full-time faculty.

Full-time faculty who helped plan community services activities had more favorable perceptions of community services administration than those with no planning involvement.

Full-time faculty who taught community services activities had more favorable perceptions of community services programs than those with no teaching involvement.

Full-time faculty grouped according to previous employment level had favorable perceptions of community services administration and were significantly involved in teaching community services activities. Full-time faculty with no previous employment experience were more involved in planning community services than those with prior employment at a community-junior college.

Full-time faculty grouped according to number of years employed at a community college had favorable perceptions of community services programs. Full-time faculty with one to two years community college employment were more involved in planning community services activities than those with three to four years employment at a community college.

Instructors had more favorable perceptions of community services than professors or associate professors.

Full-time faculty grouped according to subject matter area had favorable perceptions of community services administration and purposes. Full-time faculty in counseling had more favorable perceptions of community services purposes than those in the humanities-languages.

Summary of Respondents' Characteristics

Demographic information provided by respondents leads to the description of the typical community college full-time faculty member in Ohio as male (64.3 percent); between 30 to 39 years old (39.4 percent); previously employed at the K-12 educational level (28.9 percent); currently employed at a community college from seven to eight years (21.7 percent); prefers to be employed at a community college (81.9 percent); is an assistant professor (37.8 percent); teaches in the technical-occupational field (39.4 percent); and has a masters degree (71.9 percent).

Furthermore, he has helped plan community services activities (54.6 percent) but probably has not taught a community services activity (60.2 percent). If he taught within community services, chances are he taught from one to two activities (62.6 percent) and has been paid on an over-load basis (50.5 percent).

Suggestions for Improving the Community Services Division

Responses were grouped into seven major categories inclusive of an 'other' category. Excluding the 'other' category (N=23) the rank order of respondents' suggestions for improving the community services division were as follows: First, the community services division should survey community needs (N=27); second, a need for increased publicity and public relations for community services programs and services (N-18); third, improved administration and organization of the community services division (N=17); fourth, more full-time faculty involvement (N=16); fifth, additional financial assistance for community services (N=15); and finally, more special interest courses (N=13).

TOWARD AN ASSESSMENT OF ADULT LEARNERS' REASONS FOR PARTICIPATING IN EDUCATIONAL STUDY: A TYPOLOGICAL ANALYSIS[1]

Barry R. Morstain[2]

One of the more recognizable trends in higher education is the ever growing number of part-time adult learners in colleges and universities. The concept of lifelong learning is here, and coupled with concerns about "new markets" to help counteract a projected decline in full-time (usually 18 to 22 year-old) enrollments, postsecondary institutions are creating options and programs to serve a heterogeneous adult learner clientele. And it seems desirable to develop such programs in light of the needs and interests of the learners to be served.

Institutions have little information on the reasons or motivations of adults which influence their decision to engage in further study. Most efforts by researchers have been devoted to conceptualizing and developing survey inventories; little work has been done with the resultant factor dimensions of adults' motivations in terms of looking at group profiles. When this has occurred, the groupings have been done on the basis of demographic characteristics of adults, not similarities of learner groups in terms of motivational profiles per se. This study has as its purpose the development of a conceptual typology of adult learner motivations for participation in educational activity, and will consider certain learning environment implications of such a typological framework.

Data for this investigation came from 648 adult learners, a one-fourth representative sample of all adults enrolled in part-time study at a northeastern state college. Adults completed Boshier's Education Participation Scale, an attitudinal inventory which yield six reliable scale scores tapping the following motivations for pursuing education: Social Relationships, External Expectations, Social Welfare, Professional Advancement, Escape/Stimulation, and Cognitive Interest. After creating these six scale scores for each learner, based on respondents' rating of the importance of attitudinal participation items, the scale scores were used in a multivariate cluster analysis statistical program run on the computer. The purpose of this program was to find, through empirically defensible means, groups of learners who had very similar motivational profiles across the six dimensions, while the derived groups had statistically dissimilar profiles from each other. In other words, was it possible to assimilate a group of adult learners who had a generally similar EPS profile? If so, how many distinct groups can be derived?

---

[1]This paper is based on a study published by this writer and Dr. John C. Smart, entitled "A Motivational Typology of Adult Learners", Journal of Higher Education, Volume 48, No. 6, Nov-Dec 1977, pp 665-679.

[2]Barry R. Morstain, Associate Professor, College of Urban Affairs and Public Policy, Willard Hall, University of Delaware, Newark, DE 19711.

Results from the multivariate typological analysis suggested that five unique "profiles" were present -- each having a distinctive overall motivational pattern different from one another. A multiple discriminant analysis was performed on the five derived groups, and this statistical procedure provided additional verification of the five-group profile. These five groups were labelled or categorized based on their salient motivational characteristics. They were: Non-Directed learner, Social learner, Career-Oriented learner, Stimulation-Seeking learner, and Life Change learner. This paper concludes by discussing the research issues involved in this type of study, and considering the kinds of programs and activities which may be of high interest to learners of each motivational type.

PERCEPTIONS OF THE ROLE OF EXTENSION HOME ECONOMICS SPECIALISTS IN MARYLAND

Martha M. Myers and Gene C. Whaples[1]

The purpose of this study was to determine what degree of emphasis Cooperative Extension Service workers and volunteers in Maryland felt should be and is now (1978) being given to selected functions of Extension home economics specialists.

Data were collected from Extension professionals and paraprofessionals, county Extension Homemakers' Council presidents and secretaries, and home economics program advisory committee members. The latter three groups are volunteers organized and trained by home economics agents.

The instrument used was an adaptation of one used in a similar but broader study conducted in Kansas in 1964. The specialists' functions listed therein were expanded and redefined. Respondents rated the eighteen functions as to "should be" and "is being" given emphasis on a scale of one (no emphasis) to five (major emphasis). The means of the ratings of the functions were calculated and used to rank the functions for Extension group, distance from state Extension office, and supervisory district.

Rank ordering of the functions showed that "Keeping up-to-date on pertinent new developments and research in subject matter" was felt to deserve the most emphasis. "Performing direct service type activities such as making visits to an individual home or business" should receive the least. These two functions ranked the same as to how much emphasis respondents felt specialists were currently giving them.

Comparison of the ranking of functions by Extension group indicated a high degree of agreement for each group between how much emphasis functions should be given and how much they were currently being given. The highest positive correlation (+.89) between rankings for "should be" and "currently is" emphasis within a group occurred for home economics volunteers, indicating this group felt home economics specialists put priority on the functions that the volunteers felt should be emphasized. Volunteers, however, felt that "Holding public educational meetings" should be given 4th priority while specialists ranked this 16th. Correlation between the specialists' and volunteers' ranking of emphasis that "should be" given was +.64. Only home economics paraprofessionals' ranking correlated lower (+.47) with specialists'. Comparison of rankings by group also indicated high agreement on how much emphasis "currently is" being placed on functions. The greatest difference in rank occurred for "Advising research staff on the research needs and problems determined in the field." Specialists ranked this last while the whole population ranked it 11th.

---

[1]Martha M. Myers, Extension Agent-Home Economics, Cooperative Extension Service, 15209 Marlboro Pike, Upper Marlboro, Maryland 20870 and Gene C. Whaples, Associate Professor, Extension and Continuing Education, University of Maryland, College Park, Maryland 20742

There was little difference in the rankings given specialists' functions by the specialists themselves compared with respondents grouped by distance from the State Extension office. Rankings were more highly correlated on the "currently is" than on the "should be".

Respondents in the "far" group put "Training lay leaders in subject matter, its application and methods of presentation" last in the "currently is" ranking while "intermediate" respondents ranked this function 15th, and "near" respondents placed it 9th.

When grouped by Extension supervisory district, respondents in District 2 were in most agreement with specialists as to how much emphasis should be given. Respondents in District 4 agreed least with the specialists. In the case of the "currently is" ranking, District 1 agreed least with the specialists and District 3 most.

In general, there was a high degree of agreement between the rankings of the functions as to emphasis that should be given and emphasis that currently is being given by all the groups and the total population. Home economics specialists agreed most with administrators as to how functions should be ranked, and with other Extension specialists as to how much emphasis currently is being placed on them.

THE FOOTSTEPS EXPERIENCE: FORMATIVE EVALUATION IN THE DEVELOPMENT OF LEARNING MATERIALS FOR ADULTS

Carol M. Novalis[1]

FOOTSTEPS is a television series designed to help parents to better understand their young children, and to provide practical suggestions for coping with the everyday happenings of growing families. Starting this month, January 1979, the Public Broadcasting Service is broadcasting this series to all of its member stations. The series of 20 programs also includes comprehensive sets of curriculum materials for three separate audiences: school-based courses, informal discussion groups and individual home-based viewers. The U.S. Office of Education has funded this project for $4.5 million including all development, production and research.[2] There will be 30 programs in the full series. The last 10 are now in production.

The FOOTSTEPS project incorporated intensive audience-based formative evaluation and research, involving some 4000 people in eight cities nationwide. The audience's impact on the project has been tremendous. Their feedback has affected content selection, storylines, scripts and title selection, among other things. The audience has forced the project to portray families and their problems realistically--with everyday foibles, everyday problems, and everyday joys.

Three major research methodologies were utilized: a national random-sample telephone survey to determine information needs, a national field test to validate the three pilot programs and informal formative research which relied quite heavily on group focus interviews with community groups. This latter component has significant value to developers of materials for adults. It can be characterized as a type of community education project in itself since, to recruit volunteers, we went out into the community to recruit participants from community organizations interested and active in their own parent education projects. Many of these groups incorporated our activities into their ongoing schedules and used our materials as starting points for their own further investigations of the themes our materials were about. This process not only gave us feedback about the materials, but also about how the materials were used by different groups. In turn, this influenced our selection of format, style and content for print materials accompanying the series.

---

[1]Carol M. Novalis, Technical Manager, Applied Management Sciences, Inc., Suite 701, 962 Wayne Avenue, Silver Spring, Maryland 20910.

[2]FOOTSTEPS was developed by a consortium consisting of Applied Management Sciences, a research and consulting firm in Silver Spring, Maryland; the Educational Film Center, a production company for educational programs, and the Institute for Child Study at the University of Maryland, which oversaw content development. Kentucky Educational Television is presenting the series on PBS.

The group focus technique itself is one that is readily adaptable to the smallest of projects. While we had an extensive budget and staff for this activity, we also met with many more people than is essential to adequate feedback in most projects. We used this technique for both print and film materials. For the films and small amounts of printed materials, we generally presented the materials to the participants for the first time at the time of the meeting. We then obtained fresh, immediate reactions to a series of questions specifically aimed at: assessing the impact and quality of the message being communicated by our materials, assessing the audience's like or dislike of the materials, and probing areas where the materials lacked in clarity, appeal or relevance. We were particularly concerned throughout that the product reflect real situations, real problems and real people. In our discussions, therefore, we encouraged reactions to the realism and also encouraged the participants to relate personal anecdotes. Many of these anecdotes were later incorporated into materials as examples, or as segments of stories. Where materials were too long to be presented at the same time as the interview, they were distributed to participants earlier in the week, and the meeting of participants consisted solely of the interview which was similar to that explained above.

Analysis of the group interview results, which were recorded and transcribed in as much detail as possible, was limited to communicating the audience's remarks to producers and content developers and explaining where the emphasis and main concerns of the group seemed to be aimed. As might be expected, there was often disagreement within groups and between groups. When this occurred, producers could only rely on their own creative instincts as to what needed changing and how to change it. While, at first, this disturbed the researchers, eventually, as communication among the project staff improved, researchers found that they could trust those creative instincts--and producers could trust the reactions of the audience.

After a year of utilizing this technique on the pilot programs, the national field test of the pilots was conducted under actual broadcast conditions in six cities nationwide. Formal questionnaires were used, administered both by mail and by telephone. The items were constructed to test whether the informal research had been of value as well as to directly assess audience reactions in other parts of the country. Both the series and the research methodology were validated in this way. We have continued using the group focus technique in the ensuing production to good effect.

WHERE WOULD YOU GO? A STUDY OF RESIDENTS' AWARENESS OF COMMUNITY SERVICES IN A RURAL COUNTY

Eugene H. Owen[1]

One of the problems in the delivery of community services in rural and urban areas is that residents often do not know of the existence of public serivces that could help them. Often, even if residents of an area do know of a public service it is not their first line of defense in solving problems. This paper focuses on responses of residents in a rural county on the Eastern Shore of Maryland to questions about how they would get help in twelve problem areas. The overall study is designed to help county agency personnel to better delivery services to the residents of the county by documenting the residents' general level of knowledge of agencies.

The problem areas include day care, drug and alcohol counseling, emergency aid, employment, health, income, juvenile services, mental health and other counseling, physical rehabilitation, recreation, services to the aging and youth development. In the county under study there existed public agencies or organizations to aid with each of the problem areas listed above.

The sample was 131 randomly selected households in a rural county in Maryland. The sample was stratified by population density (i.e., town, village, and open countryside) so that different residence patterns would be represented. The study, funded by the Maryland Agricultural Experiment Station, was part of an overall examination of service delivery and use. Personal interviews were conducted in the homes of the respondents by a team of local interviewers recruited specifically for the survey. Respondents were asked where they would send someone having any of the above problems. Open ended questions were then coded into seven response categories. These categories are: agency, non-agency organization, family or self, other individual, church or minister, don't know and no answer. The agency category included all publicly and some privately funded agencies in the county. Non-agency was used to categorize all responses pertaining to organizations that were not members of the local inter-agency council. These included service and civic clubs, as well as police and fire departments. All references to other members of the respondent's family or to himself were coded as family or self. Other individual included all references to people outside of the respondent's family, such as doctor, lawyer, or counselor. Church or minister was separated from non-agency and other individual since local key informants emphasized the role of the rural church in problem solving. When respondents said they didn't know where to go for help with a problem, the answer was coded as don't know. No answer, of course, was reserved for those cases in which the respondent gave no answer to the question presented to him.

---

[1]Research Assistant, Research Team in Applied Social Sciences, Department of Agricultural and Extension Education, University of Maryland, College Park.

It was found that responses varied greatly by problem area. Agency was the most frequent response for all problem areas except for mental health and other counseling services. For mental health and other counseling services, church or minister was the most frequent response (35%). Over half the respondents answered agency for the following eight problem areas: employment (86%), physical rehabilitation (81%), income (74%), health (72%), youth development (66%), recreation (63%), day care (58%), and emergency aid (54%). Less than half the respondents answered agency for the remaining four problem areas. For three problem areas, non-agency organizations were seen as providers of service by a large proporation of the population: drug and alcohol counseling (28%), emergency aid (21%), services to the aging (23%). Other individuals were important service providers in three service areas: health (28%), mental health (23%), and recreation (23%). The church or minister's influence was greatest in solving problems relating to mental health (35%), juvenile services (19%), and youth development (13%). Respondents seemed to not know where to send people in relation to the following problems: day care (30%), income (26%), services to the aging (26%), juvenile services (25%), drug and alcohol (22%), youth development (17%), recreation (15%), emergency aid (14%), physical rehabilitation (14%), and mental health (11%). Less than 10% of the respondents fell into the family or self and no answer categories for each problem area.

A cross-tabulation by family life cycle as used by Konan and Longest (1977)[2] was performed. No overall pattern across problem areas emerged.

---

[2]Konan, Mildred and James Longest, Families' Use of Health Services in a Nonmetropolitan County: An Exploratory Study of Family Life Cycle, Income and Patterns of Use, MP 901, Maryland Agricultural Experiment Station, 1977.

PATTERNS OF PARTICIPATION IN LIFE LONG LEARNING ACTIVITIES OF PARENTS WITH CHILDREN IN ALTERNATIVE PUBLIC SCHOOLS

David J. Pratto[1]
Robert N. Jackson

In lifelong learning efforts, the emphasis is on building a process of inquiry and support for continuing education at both an individual and institutional level. This inquiry and support involves a resocialization of adults' and children's attitudes. It also involves legitimating those attitudes in the institutions through which life long learning opportunities can be facilitated.

Many studies have examined lifelong learning needs and motivations. This study examines those factors in special circumstances relevant to the building of a lifelong learning process. The parents of fourth, fifth, and sixth graders at three public elementary schools are the object of this study. Two of the schools are new "alternative" public schools. One is a "structured open" school and the other is a "classic traditional" school. The third school is a "standard modern" school. What kinds of parents are choosing alternative schools for their children? How do supporters of alternative models differ in their lifelong learning activities from consumers of the standard modern model of education?

In general, parents who send their children to alternative schools engage in educational and continuing education activities more than parents of children in standard modern schools. Parents connected to alternative schools have higher participation levels than parents connected to standard modern schools on educational activities that involve self-planned learning projects, learning activities designed and taught by teachers, workshops, and new educational activities. Additionally parents connected with structured open schools have higher participation levels on organizing associations for educational purposes and on peer generated learning activities than standard modern parents.

Parents who send their children to alternative forms of public education differ from parents whose children attend standard modern schools regarding their preferences to educational styles. These differences are, however, very much tied to the content of the learning activity. For job related learning activities, supporters of alternative forms of public education are more likely to choose structured learning styles than consumers of standard modern public education. This holds for learning whose content is public affairs and current events. Conversely, consumers of standard modern public education are more likely to prefer a self-directed learning style for job related learning than others. These differences disappear when the content

---

[1]David J. Pratto and Robert N. Jackson, Department of Sociology, University of North Carolina at Greensboro, Greensboro, North Carolina 27412.

of the learning activity is related to hobbies. Finally, regarding learning style preferences, parents who support structured open schooling are more likely than other parents to prefer a self-directed learning style for learning activities concerned with public affairs and current events. The degree of individualism is a dimension on which much of both the style and structure of education can be debated.

The general dichotomy between parents whose children attend alternative schools and those whose children attend standard modern schools is not sustained when looking beyond educational participation and preferences to issues of community participation. In examining differences in participation levels in community organizations and in leisure activities, parents who choose the classic traditional mode of education for their children differ from parents who choose either the structured open model or the standard modern model of education. Specifically, classic traditional oriented parents are more likely to participate in church groups, sports clubs, veterans clubs, professional and academic organizations and civic groups than other parents. These same classic traditional oriented parents are more likely to attend sporting events and work as volunteers. The exceptions to the greater leisure activity among classic traditional parents is that structured open oriented parents are more likely to read for pleasure than either of the other group of parents, and they are more likely to find pleasure in being alone than parents oriented to the standard modern model of education. And finally, parents whose children consume standard modern education through their children are more likely to engage in sports which provide physical exercise than parents who support alternative forms of education.

These findings do not support a single line of interpretation but they are indicative of the complexity of the issues involved when considering social structures which may be conducive to lifelong learning. There are policy considerations which may use the results of this research. It is reasonably clear, but not simple in results, that parental decisions about their children's schooling are consistent with and reflective of the parents' own lifelong learning preferences and types of educational activities. It would be foolhardy to try to develop educational policies for lifelong learning without paying attention to the socialization process as a process that clearly includes parents with schools and other social institutions. Finally, in building a process of community education, attention should be paid to the processes emerging in public schools and the resultant concurrent and complementary interactions of parents and children.

EDUCATIONAL PRIORITIES AMONG MEMBERS OF COMMUNITY VOLUNTEER GROUPS: ABSTRACT

Thomas D. Queisser[1]

Background

The incidence of volunteer activity has increased markedly over the last decade, particularly among nontraditional volunteers and persons engaged in mutual help activities. Yet there is evidence that groups experience needs that keep them from functioning as effectively as they might. The objective of the study abstracted here was to examine a sample of 300 volunteer groups and networks to determine priority organizational needs and resources. The findings focused on identifying crucial needs for education, training, and other forms of needed assistance, and recommending ways the assistance could be most useful.

Method

The sample was drawn equally from six sites reflecting variety in region, population density, degree of organized volunteer activity, and other factors. Organizations were chosen to reflect differences in purpose, size, age, and legal/financial status. The sample of organizations represented seven broad purposive types (education and employment; health and mental health; family and social support services; civic affairs; environmental support and recreation; legal rights, civil rights, advocacy and political action; and indirect support services). Within groups, up to three respondents representing different organizational perspectives were selected for in-depth interviewing. The range of respondent types typically included a leader or key staff person, a volunteer, and a recipient of services.

Two contrasting methods for collecting data were used. Open- and closed-ended questions elicited responses directly articulated by respondents. In order to collect information in addition to respondent attitudes and impressions, the critical incident technique was also used. Critical incidents generated reports of actual individual and group behavior, and conveyed more behavioral examples of educational needs.

Findings

A wide range of educational needs were cited. Most fit under the following general categories: volunteer staff administration, community relations, organizational administration/development, program development and

---

[1]Thomas D. Queisser, Associate Research Scientist, American Institutes for Research, 22 Hilliard Street, Cambridge, Massachusetts 02138.

management, board and leadership skills, assessment/evaluation, fundraising/grantsmanship, helping/caregiving, routine office management, and legal/governmental issues. Although there was general consensus regarding priority issues, three variables significantly affected the level of criticality. First, there were differences between articulated needs and those inferred from critical incidents. Second, the three types of respondents reported priorities that reflected their respective vantage points. Third, needs varied somewhat by organization age or life-cycle stage. Priorities by organization purposive type were not major, however, suggesting that otherwise dissimilar groups share many needs. The latter finding implies that one effective educational strategy to meet priority needs is to create opportunities which address the shared needs of a variety of organization types.

Members of volunteer groups often sought educational opportunities to meet perceived needs. Local, readily available sources of assistance (e.g., friends, colleagues, other groups, nearby educational facilities, local business and professional groups, informal networks) were most frequently tapped. When members took advantage of such opportunities, the outcome was judged to be only partly satisfactory. Based on the study's findings, several policy recommendations designed to improve the availability and effectiveness of educational opportunities were proposed.

A REASON-ANALYTIC APPROACH TO STUDYING SELF-HELP VOLUNTEERS: NOTES ON AN UNDERUTILIZED RESEARCH METHOD

Norma R. Raiff[1]

The emerging popularity of self-help organizations (SHOs) over the past decade and a half has reached a point where they may be considered a mass phenomenon. There are approximately one half million SHOs in America today, yet we still lack quantitative data describing the characteristics of self-helpers, "pathways" to self-helping, and various outcomes associated with self-help participation. This essay proposes that the research strategy known as "reason analysis" (Lazarsfeld, 1935, Kadushin, 1968) is an effective means of studying the self-help volunteer.

SHOs as Alternative Human Services

SHOs are here defined as voluntary associations composed of members who share a common and frequently stigmatized condition; membership is governed by rules of nonexclusion. SHOs exist to provide members with mutual aid, information, positive feedback, and dissonance reduction. Their appearance may be predicted whenever social norms fail to provide meaningful guidelines for behavior (as in the case of the recently widowed) or when highly expert bodies of knowledge fail to generate information required by lay actors in order to negotiate ordinary environments (as in Alcoholics Anonymous). In this sense, SHOs may be viewed as major vehicles for socialization and re-socialization of adults into everyday life (Silverman and Murrow, 1976).

States of Knowledge Relating to Volunteer Outcomes

Major reviews of the difficulty in studying volunteers in general, and self-help volunteers is particular, are commonplace (see especially Lieberman and Borman, 1976; Sills, 1968; Smith and Reddy, 1970; Steinman and Traunstein, 1976). There is a general consensus that impressionistic single case studies which currently dominate the field must be replaced with survey data; that time series information must be generated; and that techniques must be developed which measure the dual effect of SHO voluntarism in both (a) changing and (b) sustaining pre-volunteer motivations, attitudes, opinions and other traits.

---

[1]Norma R. Raiff, Visiting Assistant Professor, Department of Sociology, West Virginia University, Morgantown, West Virginia 26505.

The work on this paper was supported by funds from the National Science Foundation, NSF Doctoral Research Grant SOC76-80207, and by the Center for Urban Research, University of Pittsburgh.

Reason Analysis as a Research Strategy

Reason analysis is a research strategy that is oriented toward discovering common motivations behind social choices. By repeating reason-analytic questions, researchers may discover "turnover" phenomena, such as shifts in opinion and priorities that may be logically assumed to be related to volunteer activity. It meets many of the research criteria specified by the authors in the paragraph above.

The essential idea behind reason analysis is to construct in advance of data collection a list of "reasons" which the researcher conceives as salient to the acting individual's decision to behave in a singular manner, or which may restrict such a choice. This list of reasons allows the researcher to introduce competing theoretical explanations offered by academicians to empirical test. The reader is referred to Kadushin (1968, 1969), Suchman (1961) and Sills (1957) for excellent case illustrations and more specific directions on how to develop a reason-analytic framework.

The Uses of Reason Analysis in Organized Self-Helping

In 1977, we conducted an international survey of the volunteer group leaders and leader-administrators of RECOVERY,INC., a major community-based self-help (mental health) resource. Three reason analytic questions were included in this self-administered mail questionnaire, they were: (a) initial reasons for going to RECOVERY, (b) reasons for extending "trust" to the SHO framework, and (c) reasons for becoming a volunteer. Through reason-analysis we were able to develop a profile of the self-help volunteer as he/she progresses through a self-helping "career". The large number of completed questionnaires (n=393) also indicates an additional research benefit of this method; that is, that it is comprehensible to lay frameworks and encourages subjects to provide answers that are subjectively defined by the latter as important.

REFERENCES

Kadushin, C. Reason Analysis. Int. Encyclopedia of the Social Sciences. New York: Macmillan, 1968.

Kadushin, C. Why People Go To Psychiatrists. New York: Atherton, 1969.

Lazarsfeld, P (1935) 1972. The Art of Asking Why. In Lazarsfeld, P., Qualitative Analysis: Historical and Critical Essays. Boston: Allyn & Bacon.

Lieberman, M. and Borman, L. Self Help and Social Research. JABS, 1976, 455-463.

Sills, D. The Volunteers: Means and Ends in a National Organization. Glencoe, Illinois: Free Press, 1957.

Sills, D. Voluntary Associations: Sociological Aspects. Int. Encyclopedia of the Social Sciences. New York: Macmillan, 1968.

Silverman, P. and Murrow, H. Mutual Help During Critical Role Transitions, JABS, 1976, 410-418.

Smith, D. H. and Reddy, R. D. The Impact of Voluntary Action Upon the Volunteer/Participant. In Smith, D. H. (ed) Voluntary Action Research: 1973. Mass.: D. C. Heath and Co., 1973.

Steinman, R. and Traunstein, D. M. Redefining Deviance: The Self-Help Challenge to the Human Services. JABS, 1976, 347-361.

Suchman, E. A Conceptual Analysis of the Accident Phenomenon. Social Problems, 1961, 241-253.

CONTEMPORARY LEISURE RESEARCH: IMPLICATIONS FOR NONFORMAL LEISURE EDUCATION

Ronald P. Reynolds[1]

Over the past decade, extant literature related to the field of leisure services has revealed two emerging trends which have implications for the implementation of leisure education in non-traditional learning environments. These recent theoretical areas of interest center around the provision of leisure counseling as a facilitative process designed to improve individual lifestyles and the generation of new knowledge concerning the variables which modulate individual and group patterns of leisure behavior. To date, however, literature describing leisure counseling techniques and empirical investigations addressed to the social-psychological phenomenon of leisure behavior have not been generally extended to nonformal educational settings. This paper examines two instruments - the time budget and leisure interest finder and two psychological constructs - needs and values with particular emphasis to their relevance for non-traditional forms of leisure education.

Instruments

Time budgeting, a technique whereby individuals record or recount activities and the duration of these pursuits over a specified period has been utilized as a comparative research technique (Meissner, et al., 1975; Shaw, 1977; Szalai, 1972) and as a facilitative tool in leisure counseling (McDowell, 1976). Time budget studies documenting sex differences in the amount of available leisure time, variations in perceptions of individuals regarding the phenomenon of leisure and the potential which the technique has for leisure education are illustrations of its particular relevance to nonformal settings.

Interest finders represent a second commonly used technique in the leisure counseling process. Despite the potential dangers which have been associated with the procedure by Witt and Groom (1977) interest finders are readily available for use within non-traditional educational settings. The selection, administration, and interpretation of these and other leisure data collection methods will pose a definite challenge to the nonformal leisure educator.

Psychological Constructs

The concept of need satisfaction has only recently been applied to the study of leisure activity choices (Tinsley et al., 1977). Contemporary authors have tentatively labeled certain personality dimensions and types of underlying motivations for participation in various leisure pursuits. If

---

[1]Ronald P. Reynolds, Associate Professor, Department of Recreation, Virginia Commonwealth University, 812 West Franklin Street, Richmond, Virginia 23284.

preliminary findings in this area are substantiated and expanded, non traditional leisure providers will be forced to re-examine the types of services offered to clients at various stages of development and maturity.

The notion of values also occupies a central position in the field of leisure counseling. Indeed, a basic goal of many counseling processes is the exploration and possible alteration of values and attitudes concerning work and leisure. Investigators such as Kelly (1978) have identified the family as being the most significant force influencing the acquisition of predispositions toward certain leisure lifestyles. Those involved in non-traditional education must recognize the family unit as the basic source of values influencing leisure behavior.

References

Kelly, J.R. 1978. Family leisure in three communities. Journal of Leisure Research 10 (1): 47-60.

McDowell, C.F. 1976. Leisure counseling: selected lifestyle processes. Eugene Oregon: Center of Leisure Studies.

Meissner, M., Humphreys, E.W., Meiss, S.M., and Scheu, W.J. 1975. No exit for wives: sexual division of labour and the culmination of household demands. Canadian Review of Sociology and Anthropology 12 (4): 424-439.

Shaw, S.M. 1977. The problem of leisure: a comparison of subjective and objective methods of calculating leisure for males and females (Masters dissertation, Dalhousie University, Halifax, Nova Scotia, Canada).

Szalai, A. (Ed.) 1972. The use of time: daily activities of urban and suburban populations in twelve countries. The Hague: Mouton.

Tinsley, H., Barrett, T.C., and Kass, R.A. 1977. Leisure activities and need satisfaction. Journal of Leisure Research 9 (2): 110-120.

Witt, P.A., and Groom, R. 1977. "Dangers and problems associated with current approaches to developing leisure interest finders." Paper at the National Recreation and Park Association, Boston, October.

TOWARD A MIXED-AGE SECONDARY CURRICULUM OPTION

Judith P. Ruchkin, et al.[1]

The proposers of a mixed-age secondary curriculum model seek to widen current discourse about an alternative role of the school as a facilitator of life transitions for adults as well as adolescents. At a time when alternative sites and arrangements for schooling are widely discussed, it may also be useful to consider chronologically diversifying the membership of learner groups within the secondary school setting. A further goal of the presentation is sharing and exchange of information about a particular mixed-age curriculum model and learner group, which was jointly piloted during summer 1977 by the Charles County (Maryland) Public Schools and the Department of Secondary Education of the University of Maryland, College Park. This demonstration and feasibility investigation was funded as a special project under the adult and basic education grants of the Maryland State Department of Education.

Diverse disciplinary orientations were included among the developers and implementers of the curriculum model. They involved a geographer-educationist, Joseph Cirrincione; a social studies teacher, Rosellen Harmon; a reading specialist, H. Beth Davey; a mathematics educator, Joan Scott and the project coordinator with reading specialization, Stephen Steurer. The initial predispositions, shifting of views and observations of this group have been reported recently (American Educational Research Association, 1978).[2] These varied perspectives all relate to a project where "community in the modern setting", a social studies framework, served as the beginning conceptual organizer, which was oriented, modified and refined as a response to participant expressed interests in developing literacy and numeracy skills. Judith P. Ruchkin of the University of Maryland, College Park, who conceived the project and served as its director, describes the conceptual bases undergirding the model and its evolution. She argues that expanding the secondary school clientele is an essential step in realizing life-long learning, particularly for earlier generations, those unserved by public schools during prior periods of less than universal involvement in secondary schooling. She claims further that mixing generations results in a more viable learning group evidencing intergenerational civility and empathy and thereby possesses potential for promoting cognitive and affective learning.

---

[1]Judith P. Ruchkin, Associate Professor, Department of Secondary Education, University of Maryland, College Park, Maryland 20742.

[2]"Why a Mixed-Age Curriculum is Needed", a symposium held at the annual Meeting of the American Educational Research Association, Toronto, Ontario, March 28, 1978.

A description of the volunteer participants, recruitment activities, classroom interactions and climate is included. Highlights of the bases of the curriculum design allying levels of affect with the needs of the learner, recurring societal problems and disciplinary emphases are also detailed. A rationale is given for a curricular focal point, which provides a vehicle for dealing with the local community and participant needs, placing these concerns within the context of a larger set of forces and issues generated by functioning in a modern urban and interconnected system.

The form and reform of secondary schooling have been in seemingly perpetual contention from the start of universal public secondary education in the United States. At present there are many calls for schooling to serve a more restricted role and/or clientele. These proposals suggest the creation, and presumably wide-spread operation, of alternative agencies supporting the transition of youth into adulthood as well as the life-long or recurrent learning needs of postadolescents. These proposals have received serious attention to the point that it is worth exploring what might be done with existing secondary schools to respond to the current societal education needs. Rather than restricting the role and/or the function of secondary schooling, or retreating from its historic promise to serve all the citizenry, it may be possible and desirable to expand both its clientele and program.

Appropriate schooling for the citizens of a waning 20th and an imminent 21st century democracy is not readily agreed upon. This presents an additional challenge for curriculum development and instructional implementation. The original night school of the early part of the century served to offer essentially the same academic skills and experiences to working youth as regular schooling. Since that time adult school and learners have come to be seen as having distinctly different curricular and instructional needs. Whether the range of human potential and need are so disparate as to require the current degree of age segregation of learners is questioned and chronological diversity in learning group membership is viewed as an asset. In a mixed-age learner group there is potential for improved mutual listening, increased civility and widening of perspectives across generations usually kept apart by age. The target population served in the pilot demonstration project included secondary school students, drop-outs, postadolescents, and senior citizens. Accordingly, the curriculum developed reflects a concern for the unique combination of students. The activities included were derived from the particular individuals involved as well as from more generally persistent life situations.

Anticipating the advent of life-long learning, the mixed-age secondary curriculum approach addresses the potential of already established institutions to serve a mixed-age learner group. An exploratory project examined the feasibility of the existing secondary school to serve such an expanded educative function. The model assumes closer ties and new arrangements linking secondary and adult education within the public school as an alternative worthy of exploration by those still concerned with widening opportunities for the broadest spectrum of students.

THOUGHTS AND QUESTIONS ON CITIZEN PARTICIPATION

Ann Tourigny[1]

Citizen participation in human service agencies has had a long and controversial history. When analyzing the cost/benefit ratio of citizen participation, there are more questions than answers. Traditionally, citizens have been involved in human service agencies as board members and as volunteers in direct services. They have provided financial support, spent countless hours in board and committee meetings, and at one time or another performed "jobs" ranging from poster making to executive director - all for the benefit of human service agencies. Until recently, citizen participation in human service agencies was generally not the domain of all levels of society.

Consumer Participation

With the advent of the Office of Economic Opportunity, Model Cities, and other human service programs of the 1960's the era of consumer participation was ushered in. "Maximum feasible participation" became a common term - one that was frequently used but defined to suit the individual. One of the major questions in the area of citizen participation today is "what does consumer participation mean?" In order to answer this question, one must first define consumer. One definition could be anyone that is not a provider, but is that enough? Another definition could be one that receives services from the agency, or in some cases the parent of a person that receives services; but again, in many agencies this is not specific enough, particularly in light of confidentiality issues.

The second step in consumer participation is even harder than the first: "What type and how much consumer participation does the agency need or want?" This cannot be answered in a global manner but must be addressed by the individual agency. It is not only a matter of policy or regulations, but it is a matter of openness, honesty, and communication which cannot be legislated effectively.

The third step is then how to get and use meaningful consumer participation. This step is partially dependent on how the first two are resolved.

Human service agencies are at a crossroad regarding citizen participation. This is caused by three major factors; the "consumer" movement, the number of women entering the work force (thus leaving "volunteer" status), and the growing trend toward professionalism in human service systems. It is time to rethink what citizen participation means and how it can best be utilized in human service agencies.

Do We Need Consumer Participation?

Perhaps the first question to be addressed is "Do human service agencies want or need citizen participation?" In this author's opinion, the answer is

---

Ann Tourigny, Lecturer, Department of Family and Community Development, University of Maryland, College Park, Maryland 20742.

yes. Citizen participation can serve as a vital community-agency linkage. This does not necessarily mean that the "old" types of citizen participation (financial support, volunteer service, etc.) are not appropriate, but this existing foundation can be built upon. One place this building process could be focused is the agency board of directors. Members of boards of directors are usually chosen because they are community leaders, interested in a specific service area, or represent some constituency in the community. Traditionally, boards function either as policymaking bodies or in an advisory capacity. Sometimes the distinction between policymaking and advising is made clear and sometimes it is not. In either case, the "board" can be the official linkage between the agency and the community.

Emphasis has been placed on how the community relates to the agency through the board, particularly in the area of financial support. Perhaps, it is time to examine how the agency penetrates the community through the board. This is more than just public relations. It could lead to strengthening interorganizational relations since board members may serve on other boards and could provide linkages to those organizations. This could provide a strong needs assessment linkage to evaluate if the agency is actually meeting the needs of the community. Finally, board members can serve as a linkage between the agency and the community to aid in the understanding and acceptance of human service programs particularly those of a controversial nature.

Some Questions

There is no formula for the "best" board or for effective citizen participation; however, here are some critical questions that should be answered by individual agencies in either designing or redesigning their citizen participation programs.

- Is citizen participation desired?
- What types of citizen participation are feasible for this agency?
- Are the roles, duties, and responsibilities of citizens that participate (board, volunteer, consumer, etc.) defined and understood?
- Who (staff) is responsible for coordination of citizen participation?
- Are people that devote time, money, or energy to the agency properly rewarded?
- How will the agency use input from citizens?

The last question is critical, but in many cases, it remains unanswered. Indeed, there is nothing more frustrating to an individual than to devote time and energy to an agency and see it wasted.

References:

Arnestein, Sherry R. "A Ladder of Citizen Participation," Journal of the American Institute of Planners, July 1972, 216-224.

Spiegel, Hans B. Citizen Participation in Urban Development - Volumes I and II., Washington, D.C.: NTL Institute for Applied Behavioral Science, 1968-1969.

Zald, Mayer N. "The Power and Functions of Boards of Directors: A Theoretical Synthesis," American Journal of Sociology, 75, 1969, 97-111.

THE INFLUENCE OF COVER ILLUSTRATIONS AND TITLE ON THE FREE-CHOICE SELECTION OF EXTENSION PAMPHLETS FROM A DISPLAY BOARD

Curtis Trent[1]

This study measured the impact of cover illustrations and title on consumer selection of Extension pamphlets from a free-choice display board. It also examined the relationships between type of pamphlet selected, reasons for selection and personal and situational characteristics of consumers.

Two sets of six pamphlets were displayed randomly on a free-choice display board for two hours on three different days at each of the following locations in the town of Bakersville, Mitchell County, North Carolina: The County Extension office, Health Department, Department of Social Services, Agricultural Stabilization and Conservation Service office, a local bank, and the County Extension Homemaker's meeting room. An individual monitored the board at each location. When a pamphlet was taken from the board, the monitor approached the person taking the pamphlet(s) and noted the title(s) selected, asked questions as to reasons for selection and recorded his/her responses along with personal data about the consumer.

The pamphlets were single concept in nature and focused on problems related to health and nutrition. The two sets of pamphlets were identical in color, shape, size and content; the only difference was in the cover. One set of pamphlets was illustrated with titles designed to appeal to "basic needs." The second set was not illustrated and the title simply specified the subject content.

Data were recorded on 195 individuals who made selections from the display board. The statistical measure used throughout the study was the chi square at the 0.05 level of probability.

The major findings of the study were as follows:

(a) The typical consumer of the pamphlets used in the study was more likely to be female, young (21-31), with nine to 12 years of formal education and with an annual family income of $7,500 to $10,000.

(b) Consumers exhibited a decided preference for pamphlets which were illustrated and designed to appeal to "basic needs" over non-illustrated pamphlets which merely specified subject content.

(c) Sex and age were significantly related to selection of pamphlets by type of cover. Males tended to select illustrated "basic needs" pamphlets over non-illustrated subject content pamphlets to a greater degree than females.

---

[1]Curtis Trent, Professor of Adult and Community College Education, North Carolina State University, P. O. Box 5504, Raleigh, North Carolina, 27650.

The youngest group (less than 20 years old) and the oldest group (over 60 years old) showed a greater preference for the illustrated "basic needs" pamphlets than other age groups.

(d) Relatively few of the consumers indicated that physical appearance of the pamphlets influenced their selection; however, color was mentioned more often by younger consumers (less than 20 years old) than by other age groups.

The findings suggest that:

(a) Cover illustrations and titles of Extension publications are important in stimulating the potential user to make a selection from free-choice display boards. Publications with titles which appeal to "basic needs" with appropriate illustrations can be expected to have more motivational impact than those that are not illustrated and simply specify subject content.

(b) If Extension publications are designed to reach younger (less than 20) and older (over 60) and male consumers, more specific care should be given to title selection and illustrations.

(c) The educational level of Extension's audience for free-choice publications is perhaps higher than normally assumed. It follows that the reading level of future publications should be examined carefully.

(d) Further research is needed on the impact of color, size, shape and drawings on free-choice selection of Extension publications.

WHAT DO ADULTS WANT? A SURVEY OF THE CONTINUING EDUCATION NEEDS OF ADULTS IN VERMONT

Dr. John Vogelsang[1]

During the summer of 1978 through a Title I of H.E.A. grant I conducted a statewide survey of about 3,000 adults to determine the kinds of continuing education and the types of services that Vermonters want from the institutions of higher education in the state. The sample population was composed of employed and listed unemployed adults between the ages of 18 and 65. A paper and pencil survey was administered to the sample population at their place of employment or at the agency which served them.

The results show that of those who were surveyed who are interested in continuing education the majority are between the ages of 25 and 34, have either a high school or undergraduate degree, and have a total household income of between 7,000 and 20,000. They want learning experiences primarily in business and economics, supervisory training, communication skills, life/career planning, counselor training, and psychology.

Only 19% want a traditional classroom course. The remainder want different delivery systems of which on the job training, independent learning activities under the supervision of an instructor, and work experience with instruction are most in demand. The majority feel that they would take a course if there not college credit given. Of those respondents who want a degree or certificate most want a statement of satisfactory completion, a four year degree, or a masters degree. Many other factors such as the preferred place for a course, travel time, cost, and hours of work they are willing to expend on a learning activity are also included in the results.

Among the barriers that adults feel might prevent them from participating in continuing education, job responsibilities, conflicting schedules, and the fact that the available courses do not seem useful rank highest.

Of the other services that adults want, they are most interested in career information, information about educational opportunities in their region, testing of strengths and weaknesses, and help with formulating career goals.

---

[1]Director, Continuing Education Needs Assessment Project, Champlain College, Burlington, Vermont 05401

Elaborations on the above data and other information, particularly the career development needs of the respondents, will be shared.

BIBLIOGRAPHY

Biscont, Ann Stouffer and Solmon, Lewis. College Education on the Job...The Graduates Viewpoint. Bethlehem, Pa.: College Placement Council Foundation, 1976.

Cross, K. Patricia. "The Adult Learner." Current Issues in Higher Education: The Adult Learner. Washington, D.C.: American Association for Higher Education, 1978.

Hochschild, Steven. Postsecondary Education Access Study. State of Vermont: Commission on Higher Education, 1973.

Kovenoch, David. The Demand for Adult Education in Maine. Orono: The University of Maine, 1978.

Perrone, Philip; Wolleat, Patricia; Lee, James; and Davis, Sandra. "Counseling Needs of Adult Students." Vocational Guidance Quarterly, 26, No. 1 (September, 1977), pp. 27-36.

Weathersby, Rita. "Life Stages and Learning Interests." Current Issues in Higher Education: The Adult Learner. Washington, D.C.: American Association for Higher Education, 1978.

MANAGEMENT PRACTICES LEADING TO PROGRAM PRODUCTIVITY AND SUSTAINED LOCAL FUNDING, NEW YORK STATE COOPERATIVE EXTENSION, 1976

H. Peter Warnock[1]

This study dealt with a few of the more important management practices being used in New York State Cooperative Extension in the fall of 1976. It examined these practices within the framework of a cybernetic model that portrayed management practices affecting two measures of organization success. These criterion measures were known as program productivity - an extension association's ability to produce effective and efficient programs and sustained funding - the continuing ability of an extension association to elicit monies from county government.

To control for variability within the population, 57 extension associations were partitioned into three equal size groups on the basis of 1975 county appropriations. Ten associations from each of these three strata were selected randomly. Subsequent analyses were performed on the basis of small, medium and large groupings of associations.

Data for the study were obtained from a questionnaire, official records and expert judgments. The questionnaire was sent to 224 extension agents in the 30 associations and 219 were returned for a completion rate of .977.

Management practices were conceptualized into four independent variables, i.e., use of program advisory committees, leader behavior (consideration/initiating structure), organization structure, government relations. Two mediating variables, natural affluence and special interest groups, were developed to elaborate on the dependent variable sustained funding.

Throughout the study, association size appeared to have a pronounced effect on the ability of agents to describe their particular situations and Cornell faculty to accurately judge program effectiveness and use of program advisory committees. In like manner, there appeared to be decided differences in the relationship between management practices and the two criterion measures of success in the larger associations versus the medium/smaller organizations.

Significant positive correlations were found between program productivity and sustained funding in the medium and small groupings of associations. No attempt was made to identify the causal direction of this important rela-

---

[1]H. Peter Warnock, Senior Extension Associate, Cooperative Extension, Cornell University, 111 Roberts Hall, Ithaca, New York 14850

tionship, but rather it was reasoned that successful programming and high local government funding have an interactive effect on one another.

Leaders who were considerate of their workers' feelings were found in medium size associations rated high in program productivity; whereas leaders who were low in initiating structure were identified in associations judged high on the same variable.

Smaller associations using well developed government relations programs were found to be successful in garnering funds from county government. In the larger associations, this relationship was negative, however, high sustained funding was strongly associated with natural affluence, a county's ability to pay.

Approximately .94 of the agents responding to the questionnaire indicated positive feelings about using program advisory committees in the program development process. However, only in the medium size associations was a significant positive correlation found between the use of these committees and high program productivity.

No relationship could be found between the way associations were structured and their program productivity. In like manner, the research was unable to identify the effect of special interest groups on an association's ability to sustain funding from local government.

SYMPOSIUM

PUBLIC POLICY ISSUES ON LIFELONG LEARNING AND OLDER PERSONS

Sandra Timmermann, Pamela Christoffel, Kathleen Chelsvig,[1]

Since the 1971 White House Conference on Aging, when education was identified as a basic right of people of all ages, colleges, universities and other organizations have shown increased interest in providing educational opportunities for older persons. Yet, older persons continue to remain out of the education mainstream. Of all adults who participate in adult education programs, only 2.4 percent are over age 65 and 5.3 percent are 55 to 64.

This presentation, consisting of three papers, will provide data and analysis as to why this phenomenon occurs. It focuses on public policy for older persons as it relates to education now and in the future. The first paper, by Sandra Timmermann, is based in part on research conducted for the Department of Health, Education and Welfare Lifelong Learning Project, Section on Older Adults. It provides an overview of the growing interest in education for older persons and examines related issues such as educational equity, age discrimination in education and relevancy of current policy. A lifelong learning perspective on education for aging, will be offered as well as recommendations for future public policies.

The second paper, by Pamela Christoffel, is based on research conducted for the Department of Health, Education and Welfare Lifelong Learning Project. It examines current federal programs which provide some education or training activities for older adults, the extent of commitment of the federal government to date in p[illegible] such programming and the development of the Lifelong Learning Act. It assesses the impact of new legislation such as the Older Americans Act and the Comprehensive Employment and Training Act on education.

The third paper, by Kathleen Chelsvig, is based on research conducted for the National Retired Teachers Association and the American Association of Retired Persons on tuition policies for older persons in institutions of higher education. The paper examines the growth and current status of such policies and looks at the impact of state legislation and campus-initiated support services in reaching older learners. It also presents policy implications for institutions and states.

---

[1]Sandra Timmermann, Head, Institute of Lifetime Learning, National Retired Teachers Association/American Association of Retired Persons, 1909 K Street, N.W., Washington, DC 20049; Pamela Christoffel, Research and Development Associate, The College Board, 1717 Massachusetts Avenue, N.W., Washington, DC 20036; Kathleen Chelsvig, Associate Head, Institute of Lifetime Learning, National Retired Teachers Association/American Association of Retired Persons, 1909 K Street, N.W., Washington, DC 20049.

Each of the above papers, will be 20 minutes in length. After the papers are presented (60 minutes) there will be 30 minutes of discussion. The implications of public policies which provide education to older persons will be examined from an economic and social view, and the audience will be encouraged to ask questions and join the discussion.

PERSPECTIVES ON LIFELONG LEARNING AND THE OLDER ADULT

Sandra Timmermann

Traditionally, older persons in the United States have not participated widely in adult education programs. The education system has concentrated on the young, not the old; at the same time, the gerontologists largely have ignored the educational needs of the older population group. The 1970's have brought new interest in extending learning opportunities for adults of all ages. This paper addresses the lifelong learning movement stemming from legislation initiated by Walter A. Mondale when he was a senator, and relates it to education for older persons.

First, it provides an overview on what has happened in the field, analyzes enrollment patterns among older persons, and looks at trends.

Second, it explains and analyzes the lifelong learning perspective which looks beyond the education that takes place in schools and institutions to the learning that goes on informally through the media, in organizations, and with the family. The implications of this approach to education and how it affects the older population are addressed.

Third, it reviews the current role of the government in providing learning opportunities, both formal and informal, for older persons. Current policy issues such as free and reduced tuition, age discrimination and funding are covered. The economic and social implications of investment in job training and preventative education for older persons are addressed.

Fourth, it identifies needed research and future direction for policymakers. Specific recommendations are offered to both the public and private sectors.

Research for this paper formed the basis of a definitive report on the Older Learner which was submitted to the U.S. Congress from the Department of Health, Education and Welfare in February 1978 as part of the comprehensive Lifelong Learning Report.

TUITION POLICIES AND OLDER LEARNERS: POLICY IMPLICATIONS ON THE STATE AND LOCAL LEVELS

Kathleen Chelsvig

Under the sponsorship of the National Retired Teachers Association and the American Association of Retired Persons, policies of higher education institutions and state governments were analyzed regarding adoption of free or reduced tuition for older learners. Data, collected in 1976 from all higher educational institutions throughout the country, and updated in 1978, indicated that tuition programs for older learners have recently expanded, encompassing one of every three institutions of higher education.

A subsample of the institutions which had adopted a free or reduced tuition policy was examined regarding support services provided by the institution to facilitate enrollment of older persons. Simplified or special registration was the most often identified support service, although offered by less than 25% of the institutions. Approximately 10% of the institutions surveyed offered counseling, outreach, or special programs designed to facilitate the tuition policy. Only 3% of the institutions had an organized group of older students who met on a regular basis. Consequent relationships to the number of older persons participating in programs are examined.

While 22 states had adopted a reduced tuition policy through legislation, it was pending in 4 states, and 25 states had no policy, institutions had taken the lead, establishing policy before it was adopted on the state level. Policy implications for colleges, universities, and state governments are examined.

FEDERAL SUPPORT OF LEARNING OPPORTUNITIES FOR OLDER ADULTS

Pamela Christoffel

This paper focuses on issues of federal support of learning opportunities for older adults.

Beginning with the premise that education and learning opportunities can ease the transition of America as a society toward older age, an examination is made of the current federal role in support of lifelong learning. The development of the Lifelong Learning Act and subsequent outcome is also described. At the same time a consideration of the future potential of this legislation as it comes up for reauthorization will be presented.

Then, the paper turns to a broader look at current federal programs. Relevant programs are defined and discussed. In work completed for the Department of Health, Education and Welfare Lifelong Learning Project, the author identified at least fifty federal lifelong learning programs which provide some education or training activities in which older adults participate. But, as is noted, this figure is misleading because the activities are fragmented, relatively narrow in scope, and probably account for less than one percent of the roughly $14 billion dollars the government spends on lifelong learning activities for adults past compulsory school age. The bulk of the current federal effort is concentrated in a few programs, such as the cooperative extension programs at the Office of Education, aging and rehabilitation support from the Office of Human Development, and the training supported by the Department of Labor and the Civil Service Commission. While little data exists, it appears that the learning needs of older adults are substantially underserved by the federal government.

The paper concludes with an assessment of new activities under the Older Americans Act and the Comprehensive Employment and Training legislation as well as a look to the future of federal lifelong learning policies for older adults.

EVALUATION OF PROGRAMS, ATTENDANCE, AND CLIENTELE NEEDS IN PARKS AND NATURE CENTERS

Jack Wheatley[1]

Environmental educators in parks and nature centers are constantly faced with the problem of program evaluation. Ideally this evaluation should be based on interests of the clientele, program style and format, and costs in time and money of presenting such programs. Park personnel often evaluate these components in informal ways, but a more formal means of program evaluation is needed in order to obtain an objective look at environmental programs in parks and nature centers.

This symposium presents three research studies which examine various aspects of program evaluation. The study by Morfoot and Knudson, "Interpretive Program Evaluation with Traditional Administrative Accountability Parameters" examines some typical park programs in terms of their cost effectiveness, i.e., costs per visitor contact hour. "Factors Influencing Attendance at Naturalists' Programs" by Reyburn looks specifically at program attendance as it is affected by advertising and time and type of program. Characteristics of the clientele attending nature centers are described in "A Simplified Monitoring Instrument and Methodology For Evaluating Clientele Needs and Satisfaction Levels At Nature Centers" by Lustig, Lustig, and Wright.

---

[1]Symposium Chairman; Associate Professor of Environmental Education, University of Maryland, College Park, Maryland 20742.

A SIMPLIFIED MONITORING INSTRUMENT AND METHODOLOGY FOR EVALUATING CLIENTELE NEEDS AND SATISFACTION LEVELS AT NATURE CENTERS

Loren W. Lustig, Louise M. Lustig and Emmett L. Wright[1]

Throughout the United States, nature centers have become an important component of lifelong and leisure education facilities. Nature centers provide important sites for (1) extracurricular education (2) natural history research (3) models for wildlife and habitat management and (4) cultural edification (Ashbaugh, 1970). The goal of any nature center is, ultimately, to instill and develop a conservation ethic in its clientele, and to provide for human enlightenment and refinement through recreational experiences in the natural environment.

Although nature centers have been in existence in the United States since Louis Agassiz opened his Massachusetts field science laboratory in 1873 (Weaver, 1976), research into their levels of success and monitoring surveys of clientele needs and satisfaction have been rare until the present decade (Washburne and Wagar, 1972; Lustig, 1976). Effective nature center programing, must, minimally, attract and hold clientele attention, but moreover should offer dynamic, meaningful, and rewarding experiences to the recipient. Evaluation of the effectiveness of interpretive programs is critical for any responsive center and this evaluation must be based, at least in part, on feedback from the clientele (Wagar, 1974).

A significant amount of important feedback is available informally as naturalist/interpreters observe their audiences, respond to questions, and monitor facial expressions. However, informal feedback can be misleading and must be supplemented with more formal methods. Recently developed nature center research techniques include (1) mechanical recording quizboards (Wagar, 1972) (2) non-speaker audience observation techniques (Dick et al., 1975) (3) interactive audio-visual devices (Wagar, 1974) and (4) survey instruments (Putney and Wagar, 1973).

The authors undertook this study, a case survey of two Montgomery county, Maryland nature centers (Lustig, 1976) with the goal, in part, of developing a simple survey instrument which could be used by staff naturalists to gain statistically valid survey results without major outlays of staff time or monetary resources. The authors developed four survey instruments (1) non-grouped user survey (2) teacher and group leader survey (3) naturalist staff survey and (4) potential user survey which allowed not only for one way frequency distributions but also permitted cross-tabulations on inter and intra survey responses. The statistical evaluation was facilitated by the use of the Univac 1106 computer and data were analyzed by using the Statistical Package for the Social Sciences (Nie et al., 1975). As documented in Lustig (1976) and in this paper, the methodology which was utilized produced statistically significant and valid data

---

[1]Loren W. Lustig, Park Naturalist, Maryland-National Capital Park and Planning Commission, Silver Spring, Maryland, and Louise M. Lustig, formerly Program Library Assistant, Computer Science Center, University of Maryland, College Park, Maryland, and Emmett L. Wright, Assistant Professor, Science Teaching Center, University of Maryland, College Park, Maryland 20742.

for non-grouped clientele needs and satisfaction levels. Data for the entire year is obtainable with a staff time commitment of only 16 man hours per month for distributing and collecting surveys from every non-grouped visitor (over age 12) who enters the nature center. Details of this methodology are available by writing to the senior author or by a perusal of Lustig (1976).

Results of the nature centers' case study allowed for several important recommendations to be made concerning non-grouped clientele, including (1) investment of a greater amount of resources in programs/facilities for non-grouped clientele (2) acceptance of certain modifications in nature center programs/facilities to attract the elderly, the handicapped, and upper level academic groups (3) alteration of internal and external facilities/programs so as to comply with standards noted in the literature and requests of large segments of the clientele.

REFERENCES

Ashbaugh, B.L. 1970. Nature center purposes and values. Pages 1-2 in C. Schoenfeld, ed. Outlines of Environmental Education. Dembar Educational Research Services, Madison, Wisconsin.

Dick, R.E., E. Myklestad, and J.A. Wagar. 1975. Audience attention as a basis for evaluating interpretive presentations. Forest Service, U.S. Department of Agriculture, Portland, Oregon. Research Paper PNW-198. 7 pp.

Lustig, L.W. 1976. A case study and survey of two Montgomery county, Maryland nature centers; with an overview of nature interpretation as a unique spectrum in the educational process. ERIC/SMEAC, the State University, Columbus, Ohio. 188 pp.

Nie, N., D.H. Bent, and C.H. Hull. 1975. SPSS: statistical package for the social sciences. 2nd ed. McGraw-Hill Book Company, New York. 675 pp.

Putney, A.D., and J.A. Wagar. 1973. Objectives and evaluation in interpretive planning. The Journal of Environmental Education 5(1):43-44.

Wagar, J.A. 1974. Interpretation to increase benefits for recreationists. Pages 101-106 in Outdoor Recreation Research: Applying the Results, USDA Forest Service General Technical Report NC-9.

_____. 1972. The recording quizboard: a device for evaluating interpretive services. Forest Service, U.S. Department of Agriculture, Portland, Oregon. Research Paper PNW-139. 12 pp.

Washburne, R.F., and J.A. Wagar. 1972. Evaluating visitor response to exhibit content. Curator 15(3):248-254.

Weaver, H.E. 1976. Origins of interpretation. Pages 23-42 in G.W. Sharpe. Interpreting the Environment. John Wiley and Sons, New York.

INTERPRETIVE PROGRAM EVALUATION WITH TRADITIONAL ADMINISTRATIVE ACCOUNTABILITY PARAMETERS

Colleen F. Morfoot[1]
Douglas M. Knudson

Interpretation programs in parks, forests and refuges are an important kind of informal environmental education. Interpreters seek to increase the recreational productivity of a place by stimulating the visitors' ability and desire to consume the special values of the area. Their product is enhanced quality of experience (Field and Wagar, 1973).

Interpreters have difficulty in measuring and reporting outputs. Surrogate values for quality of experience are often used to support interpretive budgets or determine program mix.

This report proposes that administrative accountability and program analysis can be improved with the use of cost effectiveness studies. This will not eliminate the judgment benefit values, but it does give the interpreters useful tools for analyzing relative costs of different programs and making limited but objective comparisons among parks. Efforts to measure the output in terms of information retention or visitor interest indices are, at best, cumbersome and imperfect (Mahaffey, 1969; St. Clair, 1972; Dick, et al, 1975).

Methods

Data were gathered from interpreters in 20 Indiana recreation areas during the summer and fall of 1977. This report focuses on five state parks with both year-round and seasonal naturalists. Data from the month of July were analyzed.

Each naturalist recorded 1) the time spent in preparing, traveling to and from, and performing each interpretive program, and 2) the number of visitors attending the program, as well as information about time, weather and program type. Program related naturalist inputs (PRNI) in terms of hours and wages were determined from the time data. Five types of programs were offered--hikes, talks, audio-visual programs, junior naturalist programs and special groups. Nature center visitors were not recorded in most parks. Costs per visitor contact hour (VCH) were calculated by the following formula:

$$\frac{\text{PRNI hours} \times \text{Hourly wage}}{\text{No. visitors} \times \text{Length of program}} = \$ \text{ cost/VCH.}$$

Results

The results indicate relative efficiencies of different programs (Table 1). The Junior Naturalist program is the most expensive per visitor contact hour. It involves instruction and field work, mostly with young campers. The impact on the participants appears to be quite high. Hikes are another activity of

---

[1]Colleen F. Morfoot is a Professional Assistant and Douglas M. Knudson is an Associate Professor in the Department of Forestry and Natural Resources, Purdue University, West Lafayette, Indiana 47907.

relatively high cost. These two activities are the most frequently offered, but have the lowest attendance per program, averaging 7 per Jr. Naturalist program and 18 per hike.

Table 1. Costs per Visitor Contact Hour of July Interpretive Programs in Five Indiana State Parks

	Hikes	Talks	A-V progs	Jr. Nat'st	Special	All
Permanent Natrlsts	$.5420	$.2499	$.1738	$.9110	$.1834	$.2057
Seasonal Natrlsts	.3352	.1553	.1510	.6222	.2397	.2155

Based on data from 5 permanent naturalists and 9 seasonals. Costs are based on hourly salary averages allocated to time spent on preparation, travel and performance for each program; overhead costs not considered.

Sedentary programs such as talks and A-V presentations draw large numbers and are relatively low in cost, averaging less than 20 cents per visitor contact hour. Special programs were in the same cost range. They usually involved youth camps or other groups with large numbers and long programs. Armed with these data and statistical analyses of them, the interpreter and administrator can plan strategy for greater effectiveness of the program. By a judgment weighting of the relative value of each activity, the cost information can guide the most efficient program mix to meet the purposes of the park. Times and locations of events can be altered and tested. Comparisons among parks and among interpreters are also possible, but should not be used as a measure of personal effectiveness; many other factors are important.

Over all programs, permanent employees were about one cent cheaper per visitor contact hour than the seasonal naturalists. Sharp differences appeared for specific program types in individual parks, but they evened out. Apparently the higher paid permanent employees are somewhat more efficient than the seasonals.

The method provides many means of analysis. Inputs can be measured in hours rather than dollars and analyzed over time and across agencies. Cost effectiveness data offer firm figures which allow tangible comparisons and a partial evaluation of interpretive programs.

Dick, Ronald, E., Erick Myklestad, and J. Alan Wagar. 1975. Audience attention as a basis for evaluating interpretive presentations. U.S. Forest Service Research Paper, PNW-198. 7pp.

Field, Donald, R. and J. Alan Wagar. 1973. Visitor groups and interpratation in parks and other outdoor leisure settings. Journal of Environmental Education 5(1):12-17.

Mahaffey, Ben D. 1969. Relative effectiveness and visitor preference of three audio-visual media for interpretation of an historic area. Departmental Information Report #1, Dept. of Rec. and Parks, Texas A & M Univ. 64pp.

St. Clair, Siah Lemmard, Jr. 1972. Relative effectiveness of two personal interpretive methods at a community nature center. Unpublished M.S. thesis, Dept. of Park and Rec. Res., Michigan State Univ, East Lansing.

FACTORS INFLUENCING ATTENDANCE AT NATURALISTS' PROGRAMS

Jerry H. Reyburn[1]

INTRODUCTION AND METHODS

Several factors significantly influenced attendance at interpretive programs. Twenty-five hundred people, representing 37,212 park visitors who attended 1,030 interpretive programs at five Indiana state parks, responded to questionnaires in this study.

In addition to collection of the usual socio-economic data on these questionnaires, the park interpreters reported information about weather, program subjects, presentation methods and a count of attendance at the beginning of the programs. During the study, advertising of the naturalists' programs was manipulated by both traditional and innovative methods harmonious with the sylvan setting and people at leisure.

Four types of advertising were randomized and replicated three times during the summer. Each treatment was in effect one week starting at mid-week to be operating smoothly on weekends. These advertising treatments included a period of no advertising, personal invitation by naturalists, signs augmenting personal invitation, and a period of intense advertising including signs, personal invitation and an additional innovation.

RESULTS AND RECOMMENDATIONS

Because children under ten years of age comprised 38 percent of the audiences using interpretation and campers made up 91 percent, their needs and interests warrant special consideration as interpreters prepare programs. The average length of stay for 83 percent of campers was over two nights in all parks and over three nights in three of the parks. The usual camper is probably not just a weekend visitor, but was spending part or all of his extended vacation at the park. A variety of programs is needed to keep the interest of this visitor.

Advertising significantly increased attendance at interpretive programs at five Indiana state parks during the summer of 1972. The average attendance per

---

[1]Jerry H. Reyburn, Associate Professor, Forest Resources Extension School of Forestry, 111 Ferguson Building, The Pennsylvania State University, University Park, Pennsylvania 16802

meeting increased from 7 to 12 persons over no advertising when an advertising treatment was employed. Overall attendance increased an average of 47 percent when advertising treatments were in effect versus no advertising.

This study showed that signs and notices are most effective when used with some personal invitation. During the no advertising treatment, oral advertising was reported about twice as frequently as written as the means of learning of programs. True word of mouth advertising--park visitors informing other visitors about interpretive programs after coming to the park--reached its highest percentage, 21 percent, when interpreters were not actively advertising.

Type of program was significant in increasing attendance. Movies, slides, and lecture-type programs drew the larger numbers of attendees and are adapted to large audiences. To serve larger numbers of people with the small group type of program, such as hikes, these programs will have to be duplicated several times by one interpreter or given at the same time by several interpreters.

Time of day has a positive correlation with the size of audience. Programs drawing larger audiences are traditionally given in the evening when people are disposed to interpretation because many other competing activities are over for the day.

THE NEED FOR BRIDGING THE GAP FROM RESEARCH TO PRACTICE IN LIFELONG LEARNING

Donnie Dutton[1]

In recent years, a new note has been appearing in educational thought: Adults must continue to learn.[2] Learning, like breathing, is a requirement of living. The assumption that learning is a lifelong process is based on a new fact of life--the accelerating pace of change. For the first time in the history of civilization, the time span of drastic cultural change has been telescoped into less than the lifetime of the individual. The current generation of mature adults now represents the first generation faced with managing a culture different in kind from the one transmitted to them. The consequence of this fact of life is such that the well educated youth of today is the obsolete adult of tomorrow. What does research tell us about the implications of this for adult behavior?

Obsolesence occurs visibly in regard to knowledge. The set of facts the present adult learned about nature, the arts, and the ordering of human affairs has been supplanted by a more complete and extensive set. More knowledge has been discovered during the lifetime of the present adult population than existed at the time of its birth. In fact:[3]

1. More books transmitting new knowledge have been produced in the last twenty-eight years than were produced in the five hundred year period from the time Gutenberg invented the printing press to 1950.

2. Ninety percent of all the scientists and technologists who have ever lived are alive and at work today, developing new knowledge and applying knowledge to the problems of our society.

3. An official of the Federal Communications Commission estimated that, at the rate at which knowledge is now growing, by the time a child born today graduates from college, the amount of knowledge in the world will be four times as great. By the time that same child is fifty years old, it will be thirty-two times as great; and ninety-seven per cent of everything known in the world will have been learned since the day he was born.

Furthermore, knowledge becomes obsolete in essence. "Learned truths" become "untruths" in the light of advance learning.[4]

In regards to skills, obsolesence is even more apparent. Technological change requires adults continuously to adapt to new methods of work and often new vocations. In fact, more than half the jobs and occupations open to young adults starting their careers today did not exist when their parents

---

[1]Donnie Dutton, Ph.D., Professor and Coordinator, Adult Education, University of Arkansas, 213 Graduate Education Building, Fayetteville, AR 72701

were young.[5] Such other everyday skills as those involved in child raising, food preparation, transportation, communication, health maintenance, and leisure time activity are constantly being modified.[6] It has been estimated that young adults entering the labor force today will undergo five to seven retrainings in their lifetime. What does research tell us about the implications of this for adult behavior?

Society is in danger of becoming obsolete in other ways, which are less visible but even more tragic. The increasing necessity for a mobile population coincident with concentrated living in cities requires adults to learn new patterns, values, senses of belonging, and new ways of achieving personal identity repeatedly within a single lifetime. Such traditional havens of stability as churches, homes, schools, government, businesses, and voluntary organizations are in constant flux, striving continually toward greater productivity and compatability with modern living conditions. What does research tell us about the implications of this for adult behavior?

Humans are the only creatures on earth that use tools.[7] The ten billionth dog that ever lived cannot dig a hole faster than the first dog. But every generation of humans can do everything better because of tools. One of these tools is the computer. However, program it wrong, and the computer will do it wrong with great electronic accuracy. You see, we still have no substitute for thinking people.

It would appear that in the area of lifelong learning, people are beginning to think--to ask "why?" New ideas and thoughts are emerging all the time. Most researchers would agree that the important thing is to do a good job with their research, but it would appear equally important to see that the research produced is translated in such a manner as to be useful to those in the practical world.

One of the major undertakings in this regard was undertaken by the Department of Adult Education at Florida State University in the early seventies. This was a Research to Practice Series, and the purpose was to identify, translate, and interpret research and information relevant to significant problems in the field of adult basic education. The authors "took pains" to point out that the monographs were written primarily with the practitioner, not the researcher in mind. But with a couple of exceptions, most were not very practitioner oriented; however, they probably represent the best effort in the field to-date to translate research to practice. These monographs included:

1. Recruitment in Adult Basic Education.
2. Starting Students in Adult Basic Education.
3. Decision Making in the Planning and Implementation of Instruction in Adult Basic Education.
4. Physiological Factors in Adult Learning and Instruction.
5. The Role of the Paraprofessional in Adult Basic Education.
6. In-service Education in Adult Basic Education.
7. Facilitating Learning Through the Use of Supportive Services in Adult Basic Education.

8. Preventing Dropouts in Adult Basic Education.

9. Program Evaluation in Adult Basic Education.

10. Psychological Factors in Adult Learning and Instruction.

Unfortunately, most research is conducted and research articles are written to impress our colleagues--not necessarily to be useful. But what can you expect from researchers when they are employed by an educational system that demands this type of performance. If we were to "run" readability levels on research articles, we might be surprised at what we would find. In fact, we might be surprised at what we would find if we were to "run" readability levels on articles that have been supposedly re-written at a low level for the practitioner.

An administrator came to me recently and said, "I've got a problem. After much thought and reflection, I instituted a change in the organization that was in the best interest of the employees, but all I have encountered is resistance. Sure, I know that research indicates that people resist change that:

1. They do not understand.

2. Threatens their basic securities.

3. Is forced upon them.

All of this is find and dandy, but in plain simple terms, what should I do?" In other words, how do you take research and translate it into practice.

Why am I concerned about all this when from everywhere comes the resounding statement that lifelong learning is the wave of the future! I'll tell you why! In 1958, Burton Clark published his book entitled Adult Education in Transition: A Study of Institutional Security. In it, he discussed his "oft quoted" concept of marginality. He wrote:[8]

1. The constitutional status of adult education is permissive rather than mandatory. (States authorize adult education classes but do not mandate them.)

2. Adult education is a part time occupation.

3. Adult education does not have separate plant facilities and fixed capital. (Once community colleges, high schools, etc. have facilities, they will probably remain. The adult school has no physical roots to protect itself against retrenchment; therefore, it can more readily be discontinued.)

4. Adult education "catches the eye" first from economy minded groups. (In other educational programs, the emphasis is on curtailing facilities or salaries; in adult education, the main issue is on curtailing content and clientele.)

5. Adult educators have to sell the necessity of the program to other educators as well as to the public. (Organizational marginality is the basic source of insecurity.)

6. Adult education depends on state and federal aid and can expect little support from local school districts.

Examine these carefully, my friends, and decide whether adult education marginality has been overcome or not. Sure we have made some progress, but then chew on this for awhile.[9]

> With our long awaited Bicentennial year now in its second month and with the media reminding us daily of our glorious heritage, it seems ironic that in far too many places adult education is fighting for its very existence during our 200th birthday as a nation. Highlighting the irony is the fact that while NAPCAE and AEA/USA are planning a gala Adult Education Congress in New York City from November 18-22 of this year, the New York City Board of Education ended its 128 year tradition of providing night school for immigrants--by closing all ten locally funded youth and adult centers, effective the first day of February. Sustained opposition by thousands of concerned citizens and by various groups--including NAPCAE, whose Executive Director attended a protest meeting held at the New York Times building--failed to change the decision to end adult classes. After hearing many points of view, almost all in strong opposition to the proposed termination of adult programs, New York City Board of Education President Isaiah Robinson said, "The Board has reaffirmed its earlier decision to make cuts in tax levy support for evening and adult education programs to meet the budget reduction required by the city. Our first priority continues to be to avoid cuts that would further reduce direct instructional services to students enrolled in regular day school programs."
>
> Meanwhile across the Hudson River in New Jersey Governor Brendan Byrne's proposed budget for next year calls for massive cuts in adult education funding from the state level. In the words of a veteran observer of the New Jersey scene, this would constitute a "complete wipeout of all funds for adult education." In Washington, D.C., the sombre message was much the same: adult education must again prove that it is worthy of categorical support.

Now, all of that is directed towards the public school adult education sector; but it you have been following the news lately, I am sure that you are beginning to become aware of the effects of California's now famous Proposition 13, and adult education has already felt the effects in that state, and the nationwide effect is yet to come.

Another example! I attended the International Literacy Conference in Washington, D.C., September 8, 1978. They had presenters "all over the place," and do you know, there was not an adult educator among them--not one! Not only that, but I saw only one State Director there, The Executive Director nor officers of AEA/USA and NAPCAE were not present; and I do not know whether or not they were invited. No one seemed to know who did the inviting or why those invited were chosen.

Now, this was a conference sponsored by the White House, Department of State, Agency for International Development, International Communications Agency, and HEW.

Furthermore, USOE officials passed out a booklet entitled Publications of the U.S. Office of Education, 1977; and on page 24, there was a page

devoted to Occupational and Adult Education. There were five listings--one dealt with facts about the Bureau; three with vocational education, and one on women in non-traditional occupations.

Another point of concern to some of us in the broad field of adult education is what is happening to the Cooperative Extension Service. Reorganization has resulted in the grouping into one agency the Extension Service, the Cooperative States Research Service, the Agricultural Research Service, and the National Agricultural Library.[10] This new unit is called the Science and Education Administration (SEA). Previously, the Director of the Extension Service reported to the Assistant Secretary for Conservation, Research, and Education. Now the Director reports to the head of SEA, who then reports to the Assistant Secretary for Conservation, Research, and Education. So, Extension is now located one notch lower in the hierarchy.

Furthermore, Extension no longer exists as an entity in Washington. In fact, Extension does not even appear in the name of the new agency. The vast majority (about 80-90 per cent) of the staff of the new agency emanated from the Agricultural Research Service--which should reflect something in future happenings. Other events include:

1. Some restructuring of program units.

2. Repeated attempts to cut the budget.

3. The loss of Extension's privilege of acquiring Federal excess property.

4. The loss of Extension's privilege of purchasing through GSA.

5. Current consideration being given to moving 4H from Extension to HEW or the new proposed Department of Education.

6. Congress now funding some 1890 institutions separately in spite of all efforts to integrate.

Last year witnessed a strong push toward eliminating the National Advisory Council on Education. Funding for the National Advisory Council on Continuing Education comes up this year. Problems are already beginning to emerge.

Enough! The list goes on! We, in effect, have an image problem. It appears, for example, that AEA, NAPCAE, NUEA, NACE, and others want to argue about who is the leader for the nation relative to the field of adult education. I am not sure that the nation even knows we are around!

The problem is complex. But I propose that one step toward improving the situation is taking what research we have and decoding it to the point where it is useful to the practitioner. Maybe then those who are in positions that affect out welfare will better understand what we are all about and feel that we are doing something worthwhile. So colleagues, I salute you. What you are here for is a step in the right direction.

Our strength in programming comes from our diversity--our ability to deliver diverse programs to diverse clientele. However, our strength politically must come from unity. So, I leave you with this thought:[11]

At the banquet table of nature there are no reserved seats.

You get what you can take, and you keep what you can hold.

You can't hold anything if you don't have power, and power comes from organization.

FOOTNOTES

[2]Gale Jensen, A.A. Liverwright, and Wilbur Hallenbeck (eds.) Adult Education: Outlines of an Emerging Field of University Study (Washington, D.C.: Adult Education Association of the U.S.A., 1964), p. IV.

[3]Paper presented by Dr. C.C. Humphreys, President of Memphis State University, at the University of Tennessee Medical Unit, Memphis, Tennessee, March 12, 1972.

[4]Gale Jensen, A.A. Liverwright, and Wilbur Hallenbeck (eds.), op. cit., p. V.

[5]Paper presented by Dr. C.C. Humphreys, op. cit.

[6]Gale Jensen, A.A. Liverwright, and Wilbur Hallenbeck (eds.), op. cit., p. V.

[7]J. Lewis Powell, "From Cave Man to Space Man", Mimeographed Paper.

[8]Burton R. Clark, Adult Education in Transition: A Study of Institutional Insecurity (Berkley and Los Angeles: University of California Press, 1958), pp. 57-60.

[9]NAPCAE, The Pulse of Continuing and Adult Education, Vol. XVIII, No. 2 (February, 1976).

[10]Adapted from a speech made by Dr. Daniel C. Pfannstiel, Director, Texas Agricultural Extension Service, at the Arkansas Extension Worker's Conference, Little Rock, Arkansas, December 18, 1978.

[11]Gary A. Eyre, "Notes for Arkansas Meeting," Paper presented at Arkansas Association for Public Continuing and Adult Education, Little Rock, Arkansas, November 21, 1977.

W. June Abrams
Del. Div. of Aging
State Hospital
New Castle, DE 19720

Ralph J. Adkins
Md. Cooperative Ext. Ser.
University of Maryland
College Park, Md. 20742

Leroy B. Allen
College of Education
Univ. of Del
Newark, DE 19711

Carol Anger
623 8th St., N.E.
Washington, DC 20002

Delfina Artean
116 Quail Hollow Court
Tullahoma, TN 37388

Judith I. Bailey
Md. Coop. Extension Ser.
University of Maryland
College Park, MD 20742

Ernie Baumann
RR 2, Box 198
Hollywood, MD 20636

Dolores J. Baur
1 Sunset Dr.
Severna Park, MD 21146

Charles H. Beady, Jr.
Morgan State University
Baltimore, MD 21239

Fontaine M. Belford
Goucher Center for Ed.
Resources
Goucher College
Towson, MD 21204

Mrs. Els Benjamin
Brookside Gardens
1500 Glenallan Ave.
Wheaton, MD 20902

Libby Bertinot
2809 Cynthia Circle
Norman, OK 73069

Francesca A. Bird
3450 Court House Dr.
Carroll Building
Ellicott City, MD 21043

Ruth Boaz
2305 Greenery Ln., Apt T-3
Silver Spring, MD 20906

Nan Booth
4203 Oglethorpe St., #203
Hyattsville, MD 20781

Marcie Boucouvalas
RR 2, Box 142A
Barboursville, VA 22923

Wayne G. Bragg
Wheaton College
Wheaton, IL 60187

Allison Brown
3322 Buchanan St., $302
Mt. Rainier, MD 20822

Larry Brown
National 4-H Center
7100 Connecticut Ave.
Washington, DC 20015

Patricia J. Brown
812 W. Franklin St.
VA Commonwealth Univ.
Richmond, VA 23220

Robert L. Bruce
109 Stone Hall
Ithaca, NY 14853
C

Robert F. Carbone
College of Education
Univ. of Maryland
College Park, MD 20742

Beverly B. Cassara
10421 Courthouse Dr.
Fairfax, VA 22030

Miriam Charney
Office on Aging
Carroll Building
3450 Courthouse Dr.
Laurel, MD 20810

Kathleen A. Chelsvig
NRTA/AARP Institute of
Lifetime Learning
1909 K Street, NW
Washington, DC 20049

Pamela Christoffel
1717 Mass. Ave.
College Board
Washington, DC 20036

Barbara L. Cliff
1830 Tree View Court
Crofton, MD 21114

Dr. Craig W. Colton
Dept. of Recreation
Univ. of Maryland
College Park, MD 20742

Thelma M. Cornish
MD State Dept. of Ed.
Baltimore, MD 21240

Janet C. Cover
Extension Agent
101 W. Antietam St.
Hagerstown, MD 21740

Gary F. Creighton
9054 D Town & Country Blvd.
Ellicott City, MD 21043

John Curtis, Director
Md. Coop. Extension Serv.
University of Maryland
College Park, MD 20742

Pat Dabbs
1910 Maudlin Ave.
Baltimore, MD 21230

Robert L. Davis
Dept. of Sociology
The American University
Washington, DC 20016

Owen W. Davis
1137 42nd St., NE
Washington, DC 20012

Mary C. DeCarlo
Antioch College
1106 N. Charles St.
Baltimore, MD 21202

W. G. Dix
246 Dupont Parkway
Bridgeville, DE 19933

Joseph W. Dougherty
195 Fairways Circle
Garrison Lake
Smyrna, DE 19977

Tom Dudley
Room 175, Education Bldg.
Raleigh, NC 27611

Richard A. Dungey
10577 Twin Rivers Rd.
Columbia, MD 21043

Janice Earle
6760 Brigadoon Dr.
Bethesda, MD 20034

Margaret Eccles
Clearninghouse ADELL
6011 Executive Blvd.
Rockville, MD 20852

Gwen El Sawi
7100 Connecticut Ave., NW
Washington, DC 20015

Isa N. Engleberg
Prince George's Community College
Largo, MD 20870

Diane Everline
Director, Volunteer Service
301 Russell Ave.
Gaithersburg, MD 20760

Dr. George S. Everly
610 Center Drive
Severna Park, MD 21146

D. Merrill Ewert
Dept. of Ag. & Ext. Ed.
University of Maryland
College Park, MD 20742

H. Manford Fix, Jr.
Hagerstown Jr. College
751 Robinwood Dr.
Hagerstown, MD 21740

Nancy E. Gaither
Vol. Action Center for Howard County
5410 Leaf Treader Way
Columbia, MD 21044

Mary Gardner
Box 137
Brookeville, MD 20729

Ned L. Gaylin
Family & Community Dev.
University of Maryland
College Park, MD 20742

Fontelle Gilbert
American Assoc. of Community & Junior Colleges
One Dupont Circle/Suite410
Washington, DC 20036

Keith E. Glancy
Evening College
The Johns Hopkins Univ.
Baltimore, MD 21218

Robert Gluckstern
Chancellor, C.P. Campus
University of Maryland
College Park, MD 20742

Loren F. Goyen
11200 Lochton Street
Upper Marlboro, MD. 20870

Dr. Gerald Hanberry
Com. Res. Dev. & Spec. Pro
Prince George's Comm. Col.
Largo, MD 20870

Rosellen Harmon
Comm. Resource Learning Ct.
McDonough High School
Pomfret, MD 20675

Cecelia A. Harvey
18 Church Street
North East, MD 21901

Terry Harville
Catonsville Community Col.
Catonsville, MD 21278

Anne L. Heinsohn
110 Aimsby Bldg.
Penn State University
University Park, PA 16802

Nancy R. Heisey
46 S. Ann Street
Lancaster, PA 17602

Joan K. Herren
4321 Hartwick Rd.
College Park, MD 20740

Cathy Hewlett
St. Mary's County Dev. Center
RR 2
Hollywood, MD 20636

Lloyd Hicks
2219 Cambridge Hall
University of Maryland
College Park, MD 20742

JoAnn S. Hilliker
315 Erikson Hall
University of Kentucky
Lexington, KY 40506

Carol Hoare
1556 Forest Villa Lane
McLean VA 22101

Delores G. Hobbs
4202 Greenway
Baltimore, MD 21218

Andrew Hofer
Admin. on Aging
4654 HEW N.
Washington, DC 20203

Richard L. Hopkins
Social Foundations of Ed.
University of Maryland
College Park, MD 20742

Daniel P. Huden
5239 Windmill Lane
Columbia, MD 21044

Mrs. Gudrun Hartig Huden
Office of US Foreign Disaster Asistance, AID
Dept. of State, Rm. 1262A
Washington, DC 20523

Louise Hughes
6600 Kenilworth Avenue
Riverdale, MD 20840

George Hughston
Wallace Annex
Virginia Tech.
Blacksburg, VA 24060

Choochi Itharat
Dept. of Ag. & Ext. Ed.
University of Maryland
College Park, MD 20742

Robert Jackson
Dept. of Adult & Comm. Ed.
University of North Carolina
Greensboro, NC 27412

Sally Jackson
Coordinator of Volunteer Ser.
850 Hungerford Drive
Rockville, MD 20850

Albert James Jones
432 West 6th Street
Laurel, DE 19956

Mary L. Kallander
514 Waterford Road
Silver Spring, MD 20901

Naomi Keiter
Division of Instruction
MD State Dept. of Education
BWI Box 8717
Baltimore, MD 21240

Sandra Kemp
Dept. of Ag. & Ext. Ed.
University of Maryland
College Park, MD 20742

Albert Klavon
Dept. of Ag. & Ext. Ed.
University of Maryland
College Park, MD 20742

Dea A. Kline
Office of Community Aff
The Johns Jopkins Univ.
Baltimore, MD 21218

Douglas M. Knudson
Dept. of Forestry & Natural Resources
Purdue University
W. Lafayette, IN 47907

Hilda Koehnlein
3809 Glenmore Avenue
Baltimore, MD 21206

Eric Kramer
Adult Learning Project
The American University
Washington, DC 20015

Marjorie A. Kuenz
12233 Valleywood Dr.
Silver Spring, MD 20902

Rex L. LaMore
Center for Urban Affairs
1801 W. Main St.
Lansing, MI 48915

John Lancaster, Jr.
15209 Marlboro Pike
Upper Marlboro, MD 20870

John G. Lancaster
Md. Cooperative Ext. Serv
University of Maryland
College Park, MD 20742

Janet Landry
Box 2385
Aspen, CO 81611

John Lathrop
Conf. & Institutes Div.
University College
University of Maryland
Maryland, MD 20742

Jeanne E. Lea
5213 New Hampshire Ave.NW
Washington, DC 20011

Edgar Lee
20119 Waringwood Way
Gaithersburg, MD 20760

Robert B. Lewis
405 Ag. Ad. Bldg.
Penn State University
University Park, PA 16802

Katherine Hines Livesay
3709 Chevy Chase Lake Dr.
Chevy Chase, MD 20015

Beth Logan
Eating Together in Balto.
620 N. Caroline St.
Baltimore, MD 21205

Howard F. Long
3 K Plateau Place
Greenbelt, MD 20770

James Longest
Dept. of Ag. & Ext. Ed.
University of Maryland
College Park, MD 20742

Penny Love
813 Hopewood Road
Baltimore, MD 21208

Loren W. Lustig
Brookside Nature Center
1400 Glenallan Ave.
Wheaton, MD 20902

Daniel R. Lyle, Jr.
2339 Montebello Terrace
Baltimore, MD 21214

Noreen Lyne
9010 Riggs Road
Adelphi, MD 20783

Darlynn L. Mabon
3716 Marlbrough Way
College Park, MD 20740

Foday MacBailey
Dept. of Ag. & Ext. Ed.
University of Maryland
College Park, MD 20742

Jorie Marx
Div. of Adult Ed., USOE
Room 5052 ROB 3
Washington, DC 20202

Michael J. Marquardt
1701 Ivy Oak Square
Reston, VA 22070

Marjory G. Marvel
Office of Extended Studies
George Mason Univ.
Fairfax, VA 22030

Viola Mason
15209 Main Street
Upper Marlboro, MD 20870

T. Benjamin Massey
University College
University of Maryland
College Park, MD 20742

Richard McCord
Div. of Adult Education
320 Cathedral St.
Baltimore, MD 21201

Gary V. McNamara
700 Glasgow Street
Cambridge, MD 21613

Sharan Merriam
316 Upland Road
Blacksburg, VA 24060

Dennis Michaels
1715 Emerald Dr.
Lorain, OH 44053

Jim Milliken
203 Calvert Street
Chestertown, MD 21620

Beth Moore
7809 Chelsea St.
Townson, MD 21204

Barry R. Morstain
College of Urban Affairs
& Public Policy
Univ. of Delaware
Newark, DE 19711

Martha M. Myers
15209 Marlboro Pike
Upper Marlboro, MD 20870

Noel Myricks
Dept. of Family & Community Development
University of Maryland
College Park, MD 20742

Thomas F. Nash
12 E. Redding
Middletown, DE 19709

Clifford Nelson
Dept. of Ag. & Ext. Ed.
University of Maryland
College Park, MD 20742

Tyler F. Newton
Center for Urban Affairs
1801 W. Main St.
Lansing, Mi 48915

Avis Nicholson
521 Wilson Bridge Dr.
Oxon, Hill, MD 21233

Carol Novalis
10465 Sternwheel Place
Columbia, MD 21044

Mary H. Novotny
Girl Scout Council
1106 Bladensburg Rd., NE
Washington, DC 20002

Virginia C. Nuttall
Montgomery Co. Dept. of Recreation
12210 Bushey Drive
Silver Spring, MD 20902

Carol McGrath
Mont. Co. Dept. of Rec.
12210 Bushey Drive
Silver Spring, MD 20902

Kathryn Orso
Essex Community College
Baltimore, MD 21237

Eugene H. Owen
Dept. of Ag. & Ext. Ed.
University of Maryland
College Park, MD 20742

Jeannette Patrick
1410 3rd St., SW #11
Washington, DC 20024

Bill Philipp
Doordinator, Continuing Ed
Catonsville Community Col.
Baltimore, MD 21228

Carol Poltorak
2932 Beaverwood Lane
Wheaton, MD 20906

David Pratto
Dept. of Sociology
University of North Carolina
Greensboro, NC 27412

Carol K. Psaros
146 Fairways Circle
Garrison Lake
Smyrna, DE 19977

Ellen P. Pusey
PO Box 1836
Salisburg, MD 21801

Thomas D. Queisser
American Institutes for Research
22 Hilliard St.
Cambridge, MA 02138

Norma M. Raiff
106 Markham Drive
Pittsburgh, PA 15228

Jerry H. Reyburn
Forest Resources Extension
School of Forestry
Pennsylvania State Univ.
University Park, PA 16802

Diane Roberts
RT 10, Box 189
Frederick, MD 21701

Laura Rocco
442 W. Maple Road
Linthicum, MD 21090

Wellington S. Ross
6111 Benhurst Road
Baltimore, MD 21209

Judith P. Ruchkin
College of Education
University of Maryland
College Park, MD 20742

George A. Rummell
Kent Co. Vo-Tech Center
PO Box 97
Woodside, DE 19980

Mary B. Russell
Box 569
Seabrook, MD 20801

Rosalie J. Russell
Continuing Education
Dundalk Community College
Baltimore, MD 21222

Roni Ruszin
Conf. & Institutes Div.
University College
University of Maryland
College Park, MD 20742

Manuel M. Salguero, Jr.
Management Institute
Prince George's Com. Col
Largo, MD 20870

Beverly D. Sceery
10307 Riverwood Drive
Potomac, MD 20854

Richard C. Schukraft
Md. Cooperative Ext. Serv.
101 W. Antietam St.
Hagerstown, MD 21740

Betty Seidel
2721 Glen Ave.
Baltimore, MD 21215

Harvey Shelton
Md. Cooperative Extension
University of Maryland
College Park, MD 20742

Evelyn F. Shulman
Howard County Head Start
3450 Court House Drive
Ellicott City, MD 21043

Carol Skelly
National 4-H Center
7100 Connecticut Ave.
Washington, DC 20015

Carolyn A. Smith
Dundalk Community College
Dundalk, MD 21220

Norman G. Smith
2922 Greenway Dr.
Ellicott City, MD 21043

Robert Snyder
College of Education
Temple University
Philadelphia, PA 19122

Rosalind A. Spruill
Coppin State College
Baltimore, MD 21216

Mary J. Stephenson
1448 Jordan Ave.
Crofton, MD 21114

Richard C. Stevenson
M-NCRPC
6600 Kenilworth Ave.
Riverdale, MD 20840

Sean M. Sweeney
223 12th St., SE
Washington, DC 20003

Jack Taylor
2809 Cynthia Circle
Norman, OK 73069

James C. Thomson, Jr.
Maryland Service Corps
1123 N. Eutaw St.
Baltimore, MD 21201

Sandra Timmermann
NRTA/AARP Inst. of Life-time Learning
1909 K St., NW
Washington, DC 20049

Ann Tourigny
Family & Community Dev.
University of Maryland
College Park, MD 20742

Fran Tracy
Clavert County Bd. of Ed.
Dares Beach Road
Prince Frederick, MD 20678

Curtis Trent
Adult & Community College Ed
North Carolina State Univ.
PO Box 5504
Raleigh, NC 27650

Dan Tweed
Dept. of Ag. & Ext. Ed.
University of Maryland
College Park, MD 20742

Norma S. Tucker
Director of Continuing Ed.
Dundalk Community College
Baltimore, MD 21222

Dr. Robert Walker
Dept. of Ag. & Ext. Ed.
University of Maryland
College Park, MD 20742

Harold P. Warnock
110 Taylor Place
Ithaca, NY 14850

Lois Webb
Calvert County Commission on Aging
Prince Frederick, MD 20678

John Wells
Dept. of Ag. & Ext. Ed.
University of Maryland
College Park, MD 20742

Gene Whaples
Dept. of Ag. & Ext. Ed.
University of Maryland
College Park, MD 20742

Jack Wheatley
Dept. of Ag. & Ext. Ed.
University of Maryland
College Park, MD 20742

Joe W. Widenhouse
PO Box 1992
Boone, NC 28607

Sally Wilding
1805 Crystal Lane
Silver Spring, MD 20906

Edith Williams
600 S. Frederick Avenue
Gaithersburg, MD 20760

Jacqueline S. Williams
2839 Brentwood Rd., NE
Washington, DC 20018

Cheryle Y. Wilson
834 Allendale St.
Baltimore, MD 21229

George Wojtech
15920 Paisley Lane
Bowie, MD 20716

Calvin E. Woodland
Morgan State University
Baltimore, MD 21239

Emmett Wright
Science Teaching Center
University of Maryland
College Park, MD 20742